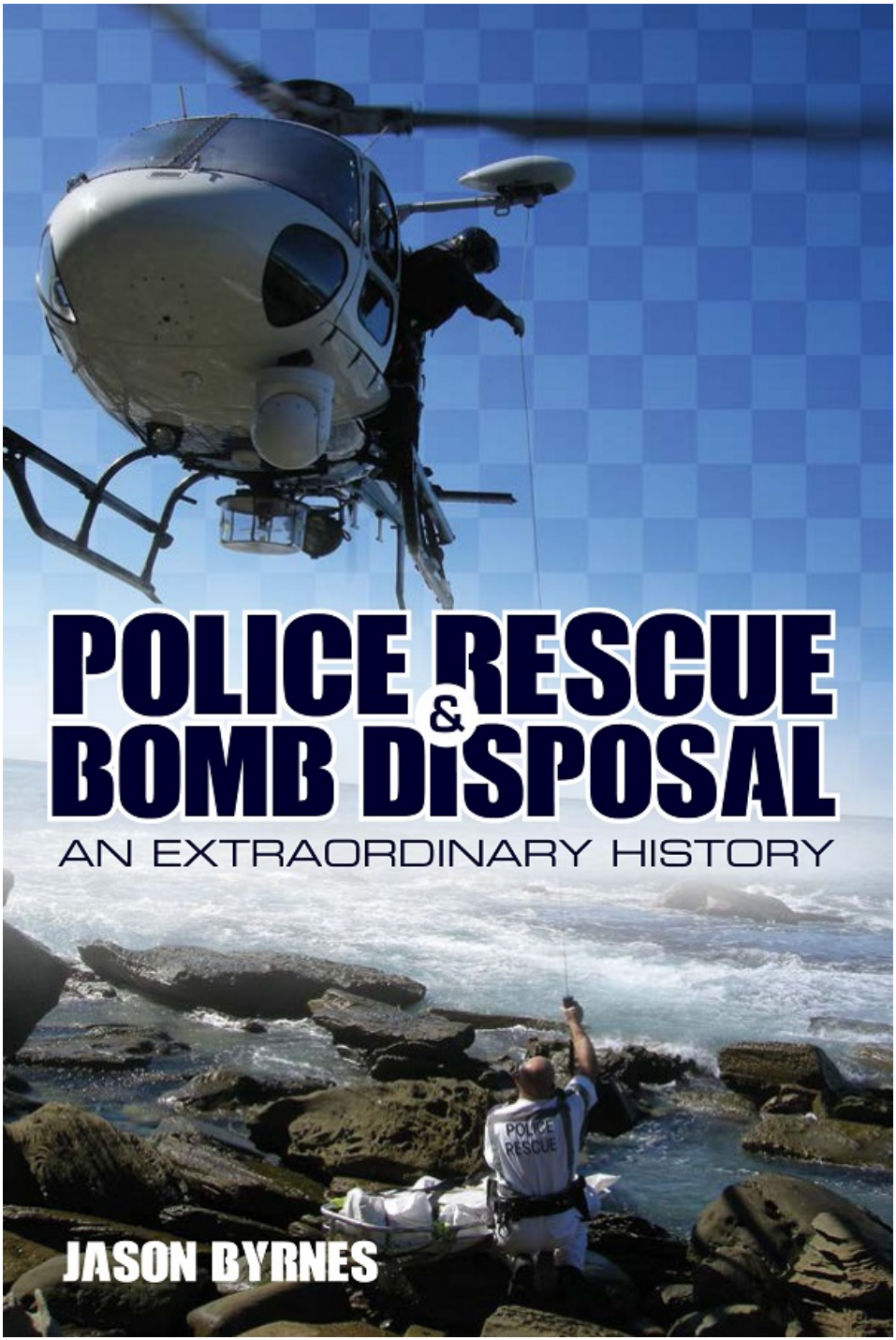
POLICE RESCUE
& BOMB DISPOSAL
AN EXTRAORDINARY HISTORY
JASON BYRNES
POLICE
RESCUE

POLICE RESCUE & BOMB DISPOSAL

AN EXTRAORDINARY HISTORY

JASON BYRNES

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POLICE RESCUE & BOMB DISPOSAL

AN EXTRAORDINARY HISTORY

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JASON BYRNES

'In police rescue, there is no such word as can't. It CAN be done.'

Sergeant Ray Tyson
Officer-in-Charge
NSW Police Rescue Squad
January 1976

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ABBREVIATIONS

ACT	Australian Capital Territory
BASE	Building, Antenna, Span and Earth
BAT	Bomb Appraisal Techniciande-centdecentralised
DVI	Disaster Victim Identification
FBEU	Fire Brigade Employees' Union
FSG	Forensic Services Group
HAZMAT	Hazardous Materials
IED	Improvised Explosive Device
NES	National Emergency Service of New South Wales
NPWS	National Parks and Wildlife Service
NSW	New South Wales
OIC	Officer-in-Charge
OSU	Operational Support Unit
PolAir	Police Air Wing
PolSAR	Police Search and Rescue
RAAF	Royal Australian Air Force
RAKED	Remote Activated Kinetic Energy Disruptors
RESCC	Rescue and Emergency Services Coordination Committee
RCC	Rescue Coordination Centre
RPAS	Remote Piloted Aircraft Systems
SACPAV	Standing Advisory Committee on Protection Against Violence
SERM Act	State Emergency and Rescue Management Act
SES	State Emergency Service or State Emergency Services
SLSA	Surf Life Saving Association
SOO	Senior Operations Officer
SPG	State Protection Group
SRESB	State Rescue and Emergency Services Board

SWOS	Special Weapons and Operations Squad
TATP	Triacetate triperoxide
TCV	Total Containment Vessel
tEODor	telerob Explosive Ordnance Disposal and observation robot
VKG	The call-sign used by NSW Police Force radio operators
VRA	Volunteer Rescue Association

PREFACE

This book is about a truly unique police unit that celebrates 75 years of operations in 2017. This is the first time that the story of these remarkable women and men has been told in a comprehensive fashion – it brings to the fore the enthralling tale of a much-admired but not well-known unit.

I am tremendously thankful for the support, cooperation and help I received from a wide array of people while I researched and wrote this book – police and non-police alike. No work of non-fiction can be written in isolation, especially pieces that rely to a significant extent on the memories of those involved in the events canvassed. This is even more so when the author is an outsider with no direct involvement in those events.

I am grateful to those serving and former rescue operators and bomb technicians who talked frankly and passionately about their adventures, even though the memories were at times painful and confronting for them. Their graciousness and support was striking, particularly those who I contacted on multiple occasions to seek clarification, additional information or to sense-check information I had gathered. It is impressive to meet people who, no matter what their backgrounds and circumstances, were prepared to tell their story with good humour and a sense of humility, or an unpretentious pride in their service to the community.

While I am responsible for the strengths and defects in the book, it would not be as authoritative and interesting as it is without the assistance from a host of people, including:

Arthur Ackroyd, Dallas Atkinson, Marcus Backway, Luke Bakey, Kevin Banister, Ken Baret, Simone Beaupark, Mark Bieder, Seg Bramble, John Byers, Fred Byrnes, Julie Byrnes, Brian Carr, Brenton Charlton, Don Coates, Richard Cordwell, Ian Colless, David Connery, Ray Constable, Bob Cooke, Anthony Crandell, Steven Day, Pauline de Graaf, Ted Doherty, Phil Downes, Bill Fahey, Bruce Gane, Ron Gibson, John Glossop, Rob Golding, Neville Graham, Neville Greatorex, Phil Green, Donna Hargreaves, Norm Hazzard, Wayne Hoffman, Ken Holmes, John King, Dick Lamb, Elisabeth Lamb, Malinda Malone, Tony Malone, Steve Maloney, Dennis Martin, Geoff Norris, Gary O'Callaghan, Andrew Parsons, Callum Patton, Sally

Place, Gary Raymond, Peter Remfrey, Lance Rice, Peter Robb, Brad Robinson, Simon Robinson, Nick Rogers, Terry Shepherd, Garry Smith, Jennifer Smith, Mick Smith, Paul Smith, Shannon Smith, Dick Tucker, Phil Tunchon, Ray Tyson, Lyle van Leeuwen, Manii Verzosa, Alan Wade, Tom Waibel, Richard Walsh, Max Walters, Garry Webster, Gordon Wellings, John Williams, Allan Woodhams and Stewart Woodward.

My apologies to anyone I have inadvertently left out of the above list.

A big thankyou is extended to Denny Neave and the team at Big Sky Publishing – who agreed to publish a first time book author. Its great to know there is an Australian company prepared to print informative and engaging histories of non-military units.

Five people deserve particular mention. I am indebted to my wife Melissa for her love, understanding and support throughout what has ended up being an on-again/off-again 24-year project. Her forbearance is truly exceptional. I am also deeply thankful for the help of Nick Rogers, a confidant, supporter, sounding board, and sense-checker of my work from beginning to end. Bruce Gane's candour and guidance during the early phases of my research was insightful. Callum Patton's generosity and hospitality was wonderful and his passion for rescue work is amazing. Marcus Backway – a force of nature within the Rescue and Bomb Disposal Unit – has also played a special role in the creation of this book. He is the person who in early 2016 prompted me to dust off the notes and early drafts I had stored away since the 1990s. Marcus' energy and enthusiasm was the impetus to finalise and produce what you are about to read.

Please enjoy.

Jason Byrnes

Elwyn 'Seg' Bramble from Goulburn's Police Rescue recovering the body of a woman who had fallen to her death at Fitzroy Falls.

NOTES FOR READERS

The historical events canvassed in this book are not detailed in rigid chronological order. Nor is the book divided into purely thematic chapters. Instead, it contains a mix of the two approaches with the intent of giving the reader an authoritative yet engaging history of one of the NSW Police Force's most fascinating and elite units.

Wherever possible the exact dates of events have been given. Several key dates, particularly from early in the Police Cliff Rescue Squad's history, have become lost in time. This is because the paperwork has gone missing, has been misfiled or in some cases probably never existed. Further, in more recent times, some dates and details have not been able to obtained due to privacy and archives laws.

During its 150-plus years of existence, the NSW Police Force has been known at different times as the NSW Police Department, NSW Police Service and NSW Police. For the sake of simplicity such technicalities have been eschewed in favour of the name the organisation was given in 1862 (and which it uses today) – the NSW Police Force (or just Force).

Like any large disciplined and technical vocation, policing has a tendency to utilise an extensive array of abbreviations, some of which are abbreviations of abbreviations! Hearing police talk among themselves can often be likened to listening to another language due to the extensive use of abbreviations and workplace slang peculiar to their industry. Police rescue operators are a sub-culture who use even more obscure parlance. The use of abbreviations in this book has been minimised to avoid confusion: they have been used either where it is a commonly used term in the community (eg: NSW for New South Wales) or where the reference is used often in the book and the abbreviation is printed for brevity purposes (eg: SRESB for the State Rescue and Emergency Services Board).

The phrase 'de-cents' is an exception. It is used throughout the book as shorthand for decentralised police rescue units. This is a deliberate choice as (apart from the full word being used in formal departmental presentations or reports) everyone in the police rescue fraternity uses the term.

Finally, this book has been produced with the kind co-cooperation

of the NSW Police Force. It is not however, an official history.

A MOMENT IN TIME

Constable First Class Ray Tyson of the New South Wales (NSW) Police Cliff Rescue Squad stood alongside the twisted metal wreckage of a truck and a car. The two vehicles had collided on the busy Parramatta Road at the bottom of Taverners Hill, less than 10 kilometres from the centre of Sydney. Gaining speed on the straight but sloping stretch of road, the truck had collected the car, killing one of the latter's occupants while seriously injuring and trapping the others.

Initially no one had been able to free the trapped and dead; bare hands could not bend the metal and tow trucks could not pull the vehicles apart without maiming those still alive and in pain. It was in the aftermath of World War II and there were no road rescue units in Australia. With few other choices, an ambulance officer at the scene requested the Police Cliff Rescue Squad. He hoped the squad, which was starting to attract some renown for its innovative approach to recovering bodies and rescuing people in Sydney, could improvise a solution.

Special Sergeant Harry Ware and Constable Tyson arrived some time afterwards in a utility truck. The two had never undertaken such a task before and they had no hydraulic equipment which rescue services today consider essential to conduct road rescues. Instead the two used their ropes, crowbars, picks, spikes and some 'common sense'[1] to get the victims into the ambulances without further injury.

After the ambulances left the scene with the last of the injured, Tyson pondered the rescue and its implications for himself and the squad. The nation was on its way to returning to normalcy after the end of the Pacific war. Eventually petrol rationing would end[2] and the numbers of vehicles travelling the state's roads would quickly exceed pre-war levels. More cars would lead to more crashes with people trapped, Tyson thought. If this was so, the constable felt he and his sergeant should prepare for the coming onslaught.

The history of police rescue in NSW had begun.

POLICING IN NEW SOUTH WALES

Protecting life and property has been an inherent duty of civilian police since Sir Robert Peel established London's Metropolitan Police in 1829. As a then British colony, NSW was greatly influenced by British governance and organisational practices, yet by 1829 the ever-growing antipodean colony of Sydney had had police-like organisations in operation for four decades.

In August 1789, barely 18 months after a penal colony was first established at Sydney Cove, a Night Watch was created to keep the peace and guard the few stores owned by authorities. Captain Arthur Phillip, the colony's first governor, had been forced to create the group as his military forces (Royal Marines) refused to undertake general policing duties[3] in a male dominated settlement that was becoming increasingly violent and lawless. With a reluctant military[4] and few freemen available or interested in being police, the governor turned to the group of men who were creating much (but not all) of the mischief themselves – the convicts.

Twelve good behaviour convicts formed the Night Watch; they were placed under the command of Police Magistrate (and Marine officer) Captain David Collins. In groups of two or three, and with powers of arrest and entry, the watchmen patrolled the settlement at night. Recruited on the basis that 'their diligence and good behaviour will be rewarded by the Governor',[5] the Night Watch were initially quite successful and soon began to perform daytime patrols. They were reorganised into the Sydney Foot Police Force in 1790 and within a few years convict constables were patrolling the rural towns of Parramatta, Toongabbie and in the Hawkesbury area. Arrests were made, the peace was often kept and it was a convict policeman who first raised the alarm of the 1804 convict uprising in Castle Hill. The effectiveness of convict police reduced over time and they were eventually phased out when the numbers of free men in the colony increased.

For most of the 19th Century, NSW policing was decentralised and fragmented. Cities and larger towns had their own forces and water police units operated in the major harbours. But there were also other police groups dispersed throughout NSW. They included border police, native units, gold fields and the mounted police. Some

undertook constabulary operations in rural areas against indigenous communities, others countered the threat of bushrangers or performed guarding duties. Under-resourced, poorly educated and trained, directly answerable to powerful local magistrates, and responsible for applying court ordered punishments, police in NSW during this period had limited popular support.

This began to change in the aftermath of major race riots at the gold fields near the central-west town of Lambing Flat (modern Young) in mid-1861. Local police proved unable to prevent interracial violence between goldminers and they struggled to restore order, even with police and military reinforcements. Though eventually quashed, the riots had briefly threatened to create social and financial upheaval so in 1862 the colony's legislature passed the *Police Regulation Act of 1862,* which centralised all policing into one organisation – the NSW Police Force. The Act set minimum recruitment standards and modest improvements to employment conditions. Within a generation, the Force was well on its way to being a cohesive and effective policing body.

As early as 1809 convict constables were commended for conducting rescues[6] but during the following century such acts were generally ad-hoc in nature or incidental to the duties of most police. Sydney's Water Police were somewhat of an exception as they regularly came to the aid of capsized vessels or drowning swimmers. From January 1913 to December 1914 alone, they went to the assistance of 72 capsized boats, rescued over 500 crew and passengers, and recovered 66 bodies.[7] In 1933 the unit purchased two hand-held Sparklet brand resuscitators;[8] the first rescue where one was used occurred on 24 February 1934. That was a busy year for the Water Police; they attended 162 rescues and 33 body recoveries (six of which had jumped from the newly opened Sydney Harbour Bridge).[9]

The gradual mechanisation of the police force (from foot to bicycle to motorcycle and motor car) in the early 20th Century combined with innovations such as telephones and radio communications, to enable police to respond quickly to calls for assistance. The instances of police gallantly saving people in peril consequently increased, whether it be stopping bolting horses in city streets or rescuing people from flood waters, burning houses or other dangerous situations. In 1907 Traffic Constable William Davis descended a sewer shaft full of toxic gases to rescue two collapsed

workers, and in 1913 Sergeant Charles Mallard rescued two men who had been overcome by gas inhalation. On Sunday 17 November 1935 a Constable Hungerford 'pluckily went to the assistance of a man who was enveloped by flames through a petrol bowser igniting'[10] at Mungindi on the NSW/Queensland border. In darkness on Tuesday 16 August 1938 a car crashed over Sydney's Spit Bridge and into the waters below. Constables Pinner and Kelly swam to the vehicle; Pinner tried to keep the driver alive while Kelly attached a rope to the car. Other police, an ambulance officer and members of the public used the rope to pull the car out of the water but by then the driver had died. Both constables were commended for their bravery. On Wednesday 12 April 1939 a Constable Bottomly jumped off the Iron Cove Bridge into the river below to rescue a mental patient who had also jumped from the bridge. This rescue was made more dangerous by the fact that the river is shark infested.

Wireless radio was first tested by NSW Police in 1934 and the following year it was used for the first time in a rescue. On Sunday 6 January 1935 a boy on a canoe was caught in the tide and found himself five miles out to sea, off Manly. The wireless station at the Police Depot in the suburb of Redfern contacted one of the few radio-equipped patrol cars in the Force at the time.[11] The patrol drove to Bluefish Point, North Head, where one of the policemen borrowed a telescope. He located the youth and radioed his finding to the depot. Commercial radio station 2UW was then contacted and its radio-equipped aeroplane was directed to the boy. Once there, the plane circled the canoe until the government's pilot steamer *Captain Cook* arrived to effect the rescue.

As part of efforts by senior commanders to establish a culture within the police of public service, officers were encouraged to obtain first aid and life saving qualifications. In 1907 it became a mandatory requirement for all recruits to be able to swim, in 1925 recruits also had to be first aid qualified before they could graduate. First aid skills in particular were useful as for many years the police found themselves operating a de-facto ambulance service – conveying 447 people to Sydney hospitals in 1903, 913 people in 1910 and 1075 people in 1919.[12] While the last departmental annual report to mention such transportations was 1921 when 1116 people were conveyed to various Sydney hospitals,[13] as late as 1947 it was reported that the policeman at Brooklyn (to the capital's north) was expected to also operate the local ambulance.[14]

CLIFF RESCUES AND WORLD WAR II

The decision to form a unit of police to conduct body recoveries and rescues was made during World War II; it was inextricably linked to the beautiful yet treacherous sandstone coastal cliffs that are interspersed among some of Sydney's most notable beaches. Some of the better-known cliffs are in the city's eastern suburbs and include the 60-metre 'Jacobs Ladder' at Vaucluse, the 100-metre cliffs along Dover Heights and, especially, the 28-metre cliff known as 'The Gap' at Watsons Bay. These cliffs are very much part of the city's aesthetic beauty and by the 1930s were well-established tourist attractions and recreational locations. At all times of the day and night people passed (and continue to pass) by the cliffs either to look at the views, explore, descend to the rocky foreshore to fish and, on occasion, to engage in amorous pursuits.

The frequency of incidents of people falling down the cliffs or being washed off the rocks at their bases while fishing, steadily rose as Sydney's population increased. It was during the Great Depression though, when unemployment rates reached 30 per cent and thousands were evicted from their homes, that the cliffs – and The Gap in particular – sadly became renowned as suicide spots. The heights were sufficient for people to jump to their deaths on the rocks below, although it was not unknown for some to survive the fall (badly injured) when they plunged by error into the pounding surf.

The identities of those who recovered the bodies of the dead, or who rescued injured people, from the cliffs depended on circumstance. Local residents, passers-by, ambulance officers, firemen and others are all recorded as having been involved at various times. Rock fishermen in particular were often first on the scene as they were usually nearby when a person jumped or fell, or would stumble across a body at daylight when they made their way down the cliffs to fish.

The one group of people who responded to each incident though, were the police. Their attendance was partly because of their duty to protect life and property, partly to establish whether a crime had occurred,[15] and in cases of death, to investigate the matter for the coroner – the oldest office known in English law.[16] While police in NSW were first formally given the role of agents of the coroner by the

Coroners Act 1898, they had performed such duties since the earliest days of the colony when police magistrates also exercised coronial responsibilities to determine the causes of fires and deaths. The practical upshot was that the police were almost always involved in the thick of the action to recover a body or rescue an injured person at Sydney's cliffs.

A typical example occurred on Monday 23 November 1931 when a Constable Hamilton, who was peering over the cliff to look for the body of a man who had leapt to his death days earlier, saw another (badly injured) man crawling along a ledge three quarters of the way to the bottom. The constable and a local resident scrambled down and administered first aid until ambulance officers and another resident arrived. The group placed the badly injured male onto an ambulance stretcher and carried him up the cliff, with the rescuers hanging onto ropes lowered from the top.[17] A rescue on Wednesday 15 March 1933 had an unusual ending when, reaching the bottom of a cliff in response to a rescue call, a Constable Bonami from Vaucluse Police Station discovered the body was that of a calf.[18] Police were also called to the cliffs to prevent suicides such as on Tuesday 8 November 1938 at The Gap when a man standing at the cliff's edge told passers-by to let him jump. A Sergeant Corbett and Constable Gipp were called by a member of the public: the police 'crept' through the fence before engaging in a 'fierce struggle' to drag the man to safety and then take him for psychiatric help.[19]

The preferred method by police to move an injured person was to lower them to the bottom of the cliff and transfer them to a water police launch. Often the seas would be too rough for boats to land, particularly if surging seas caused thunderous waves to smash across the rocks at the bases of the cliffs. Sometimes in these conditions a rescuer would brave the surf and swim from the boat. Such a rescue occurred on Sunday 13 February 1938 when a young boy fell 25 metres at Rosa Gully, Vaucluse. Initially no one could get to the youth from the top of the cliff so several water policemen went to the scene in the pilot steamer *Captain Cook*. The boat could only get as close as 400 metres from shore, its skiff about 50 metres. Constable Doug Lechleiter (who was on the skiff) swam the rest of the way. By the time Lechleiter reached shore, local resident Mr Lewis along with Constables Harry Pierce, William MacRae and Joel Butcher, had descended the cliff and were applying first aid to the boy. A rocket was then fired from the *Captain Cook* with a line of rope attached to

it. The rope was tied to the youth and both Lechleiter and Pierce swam the boy to the boat. The two received commendations for their actions; Lechleiter would later command the Water Police.

Harry Pierce again came to notice for his actions along the cliffs of eastern Sydney when on Wednesday 6 December 1939 he, a Sergeant Third Class McFarlane and Constable First Class Cary, prevented a woman throwing herself off The Gap. Just below the top of the cliff the woman was on a ledge wide enough only for one person. With a long drop to the bottom, Pierce attached a rope between himself and a safety fence. Cary went to the woman but she attacked him, and whilst the two struggled, Pierce lowered himself and grabbed the woman before dragging her to safety. Four days earlier a Sergeant Third Class Selwyn and Probationary Constable Brian Doyle (later to be Assistant Commissioner and the officer oversighting the expansion of the Police Rescue Squad) recovered a man's body from the bottom of Jacobs Ladder. The two descended using a rope, hand over hand. They then scurried over 150 metres to the body 'whilst a strong wind was blowing and a strong sea running.'[20]

The early years of World War II saw a 'marked increase'[21] in suicides and deaths along the cliffs.[22] This was particularly the case in late 1941 and early 1942, when the threat of Japanese invasion seemed imminent. The introduction of food rationing also contributed to the numbers of rescue incidents because more people ventured to the rocks to catch fish, which were exempt from rationing. Often the ocean swell would catch the amateur fishermen unawares, or they would stumble while making their way up and down the narrow paths from cliff top to shoreline.

Without any specialist training and overall planning, police did what they could to help those in distress or the deceased. Some councils and concerned citizens left ropes out for rescuers to use but these quickly rotted and were of a generally poor quality.[23] Eventually Sergeant Second Class Bill Neary, the Officer-in-Charge (OIC) of the Rose Bay Police Station, took the initiative and acquired a 60-metre length of manila rope[24] with a circumference of eight centimetres. Keeping the rope in the back of his police car, Neary responded to every cliff rescue call police received in his area. Though regarding himself as the chief rescuer, the sergeant seldom descended a cliff. Instead, experienced rock fishermen or other police would volunteer (or be volunteered by Neary) to make their own way

to the body. The sergeant and others would then lower the rope to the rescuer, who would tie it to the body. If the victim was deceased the body would be raised to the top, if alive, lowered to the bottom except if the sea was too rough or a rescue boat did not arrive. In those cases the victim was raised to the top, regardless of the injuries already suffered or aggravated by the haul.

Protruding sharp rocks along the cliffs added further danger for erstwhile rescuers and the injured through the risk of ropes fraying or breaking with constant friction. Local firemen devised a system of linking ladders together for the shorter drops, but it was not robust and could only be used safely in calm weather. Some ambulance officers constructed a primitive cliff rescue device – a wooden triangle with a pulley wheel located at the apex. Anchored by men standing on the triangle's base, the rig's apex protruded over the side of the cliff. With a canvas stretcher tied to one end, rope was fed through the pulley and raised or lowered by a hauling party. When the stretcher containing the victim was raised to the cliff top, a delicate balancing act was performed to bring the victim to safety. In all, 'it wasn't very efficient but there was no other way.'[25]

Actions by police and others at the cliffs did not go unnoticed by the Police Force's hierarchy. The number and frequency of such calls gave rise to the concern that it was only a matter off time before an amateur rescuer was seriously injured or killed. Police Commissioner William 'Bill' MacKay decided that a specialist cliff recovery unit was needed for Sydney, but it didn't have to consist of police. The war had brought about a 'heavy increase'[26] in the amount of non-law enforcement duties allocated to the Force[27] and it struggled to maintain effectiveness across the broad spectrum of its operations. Therefore MacKay looked to other agencies to take the lead. Despite the demonstrated interest in the work on the part of some individual ambulance officers and firemen in eastern Sydney, neither the heads of the Central District Ambulance[28] nor the NSW Fire Brigades[29] were interested.

HARRY WARE AND HIS TEAM

In 1942 Commissioner MacKay approached the National Emergency Service of New South Wales (NES), a civil defence body established in 1939 in anticipation of the outbreak of World War II. Since 1939 the NES had trained teams of volunteers and police to undertake civil defence rescue tasks,[30] with some given additional training to demolish bridges and buildings should there be a Japanese invasion. The skills of some NES volunteers at Hurstville came to public prominence when on Sunday 12 April 1942 they, along with an ambulance officer, erected and utilised a wooden 'derrick apparatus' to retrieve two brothers from the bottom of a 76-metre seaside cliff at Wattamolla, to Sydney's south. The brothers had been trapped for over 12 hours and police efforts to rescue them had been unsuccessful. The derrick had been a derivation of an NES-approved design used for civil defence rescues. Sometime after the rescue, agreement was reached between the NES and MacKay for the organisation's chief instructor to assist the police in conducting body recoveries (and rescues) along Sydney's cliffs.

Born in South Australia on Thursday 23 December 1897 Harold 'Harry' Frank Avondale Ware was a former sailor and highly accomplished rigger who had worked on the Sydney Harbour Bridge since 1926. A resident of the western suburb of Five Dock, Ware was probably best described as 'little in size, big in heart (and) had no fear.'[31] In his time on the bridge Ware narrowly avoided serious injury or death on several occasions, the episodes seemed not to faze him. Legend also has it Ware was the first worker to cross the bridge when its two arches were joined up during construction in August 1930. The honour was to have been awarded to a senior construction official however, standing at the very top of the bridge when the two sections were joined, the short and stocky Ware found the temptation 'irresistible'.[32] A reprimand did not prevent Ware from subsequent promotion to senior rigger and in 1941 he was seconded from the Department of Main Roads (responsible for the maintenance of the Sydney Harbour Bridge) to the NES, where he delivered roping training to NES members and police.

Despite not having any experience in cliff work Ware happily took on the new responsibility. A deeply inquisitive man, Ware went to

the NES' senior engineer for advice on what devices could be used along Sydney's sandstone cliffs. Together the two improved the design of the contraption used at Wattamolla, and created a large wooden 'swinging derrick'. At the edge of a cliff three large logs were tied together in an A-frame with a fourth longer log placed on top, protruding far enough over the side to allow a rescuer to be lowered without hitting rocky outcrops. The derrick was secured through a series of manila ropes tied to support posts and pegs, with two main lines of rope fed through a series of pulleys and snatch blocks.[33] Those two ropes were operated by a dozen or so men, standing behind the derrick hauling a rescuer and/ or victim up and down a cliff in a hand-over-hand fashion. Although powered winches were available to operate the ropes, Ware preferred the human touch:

'I don't believe in winches because then you're trusting human lives to a mere machine.'[34]

A rare photograph of the wooden swinging derrick design initially used by Harry Ware and his team on behalf of the police. No details survive as to the exact date of the photo but it appears to be a training session near Milsons Point, North Sydney.

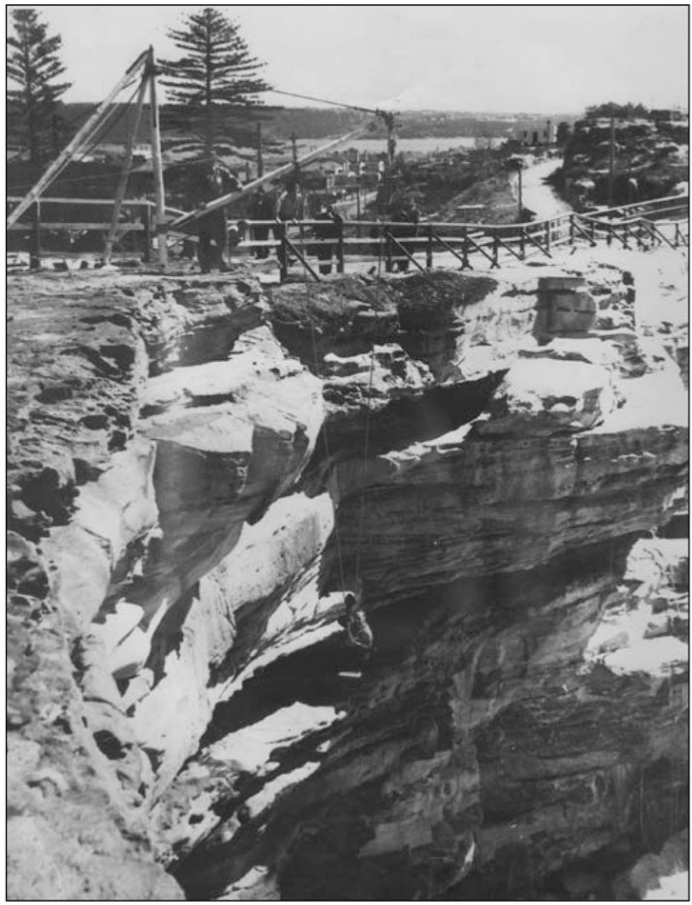
The Vaucluse Council was supportive of this initiative and allowed the components of the derrick to be stored at the rear of the council chambers. Council workers also cut holes at cliff top locations nominated by Ware, so as he and his team could to easily secure the derrick into the ground when they set it up. While the Woollahra and Randwick councils provided similar support, Manly's council did not.

At the time the cliffs at Manly were under the control of the military, which deemed permanent holes as being potentially useful to the enemy should there be an invasion.

To provide the manpower for rescue operations, Ware called on colleagues and friends who were NES volunteers.[35] After performing a demonstration at The Gap in front of Premier William McKell, Commissioner MacKay and other 'bigwigs',[36] Ware and his team became the authorised body recovery and rescue operators for all cliff incidents reported to police.

Though excellent in theory, the wooden derrick required a lot of flat ground to set up, something lacking along most cliff tops. Further, the contraption proved to be very cumbersome as 'all sorts of hair- raising things happened when this gear was used.'[37] At the higher drops the machine could be a 'disaster'[38] as the two main ropes often intertwined. On more than one occasion Ware was forced to untie himself and climb back up the cliff. After rethinking the problem, the whole device was replaced by a stiff-leg wooden crane design that came to be known as the Cliff Rescue Machine. The machine consisted of a main post (jib) that was erected perpendicular to the ground, and supported by two logs fastened to the top of the jib and extended backwards in a V-shape. A wooden boom was attached to the base of the jib with a metal collar; the collar allowed the boom to swing in an arc from the cliff top over the side of the cliff. After more experimenting, a single main rope was introduced to haul both the rescuer and victim. The rope was guided along the jib and boom through several pullies and blocks, the block on the boom being movable. This gave the haulers a 2:1 mechanical advantage (making the load lighter). Other support ropes were also attached to various posts to improve stability.

Fitted to the business end of the main rope was an Oregon wood stretcher, the type then being used by British civil defence agencies and the NES. Painted yellow, buoyant in water and with thick wooden slats and holes acting as tie points for rope lashings, the 'ladder stretcher' was the preferred tool to place bodies or injured people when raising them from the bases of cliff.[39] A wooden bosun's chair could also be fixed to the main rope in lieu of the stretcher, and that was Ware's preferred way to descend a cliff. Whichever option was used, a guide rope was attached and controlled by one of the hauling party, so as to help avoid the rescuer and patient spinning uncontrollably in windy conditions.



The stiff neck wooden crane that came to be known as the Cliff Rescue Machine. This photograph is believed to be of Ware (in the bosun's chair down the cliff) and his team, testing the new design at The Gap. Further work was done to streamline the use of the main rope.

Ware, his volunteers and their machine became a regular sight along the cliff lines of eastern Sydney. They were able to do their work without serious injury to either the team or Ware, who was the one who more times than not 'went below' riding the bosun's chair or ladder stretcher. The reliance by police on the team proved problematic though; they were volunteers who had full-time jobs at various locations. To get the men to a call, one or more police cars had to be dispatched to round the men up. They in turn would make their way to the council chambers in a truck to collect the machine, and then drive to the scene. This all took time. Furthermore, in an era well before telephone ownership was common, the team were

practically uncontactable at nights and on weekends.

A photo taken in the 1950s of the Cliff Rescue Machine in action, with Harry Ware at the cliff's edge and Ray Tyson near the jib. Unknown contents are in a bag on the ladder stretcher. By the 1950s the machine's jib, posts and boom were made of galvanised steampipe.

THE NSW POLICE CLIFF RESCUE SQUAD

With the concept of a body recovery team for Sydney's cliffs proven to be viable, Commissioner MacKay decided that police should undertake the role given they were able to respond to calls 24 hours a day, seven days a week. Rather than turning Ware away though, MacKay asked the rigger personally if he would like to stay involved through training and working as required with police.[40] Ware (with the support of the NES) readily agreed and he selected 24 men from the police demolition teams he had already trained. A sergeant was given administrative responsibility over the new group, to organise logistics and control any unruly constable who didn't display appropriate respect to Ware. The constables were all attached to uniform duties in eastern Sydney but were expected to immediately respond to any callout, or to attend necessary training sessions. Thus with one sergeant, an NES employee and a group of part-time general duties police, what soon became known as the NSW Police Cliff Rescue Squad began operations. The exact commencement date has become lost in time but it is believed to be in late 1942.[41] This lack of a record of the commencement date is indicative of the somewhat unorthodox circumstances surrounding the formation of the capability, and the Force's emphasis on achieving results rather than completing paperwork.

Within 12 months it was realised that a single team of part-time operators was not enough to guarantee a turnout of sufficient numbers of men to all calls. Training was expanded to include police from the stations at Daceyville, Paddington, Darlinghurst and Redfern. Ware insisted that the men be suitably skilled, preferably with a mechanical or trade background. A written exam was used to gauge the abilities of potential team members. Having passed the exam, trainees underwent a two-week course focusing on basic rope and knot craft, mechanical skills and teamwork. On the parade ground at the Redfern Police Depot the police were drilled relentlessly in the various types of knots (technically bows and hitches) to be used and the maintenance of the hundreds (later thousands) of metres of manila rope. Working in teams, they also assembled and disassembled the Cliff Rescue Machine repeatedly until they could assemble in under-10 minutes. They also practiced

signalling through the use of whistles; the devices were used in the rigging trade and remained Ware's preferred communication method until he retired.

Police in the 1940s learning to assemble the Cliff Rescue Machine.

Away from Redfern, Ware made the recruits swim with a ladder stretcher in the ocean off Dunningham Reserve, next to Coogee Beach. It was important that they experienced the stretcher's

buoyancy in case it and they were swept off the rocks by freak waves. At night they would be taken to the base of cliffs and swim in the ocean with only torches shone by teammates at the water's edge for guidance. Where possible, time was also spent using the machine on tall cliffs in the Blue Mountains. Graduates from the training would then be called upon when needed to help Ware at rescue and recovery scenes. While he went below more often than anyone else, the NES instructor ensured each policeman could do it.

A policeman undergoing rescue training in September 1953. He is holding on for dear life to the ladder stretcher while being pounded by the surf.

In 1944 Commissioner MacKay endorsed a plan to further improve police responsiveness. Starting in July, Ware conducted 'intensive training'[42] for every policeman under the age of 45 who

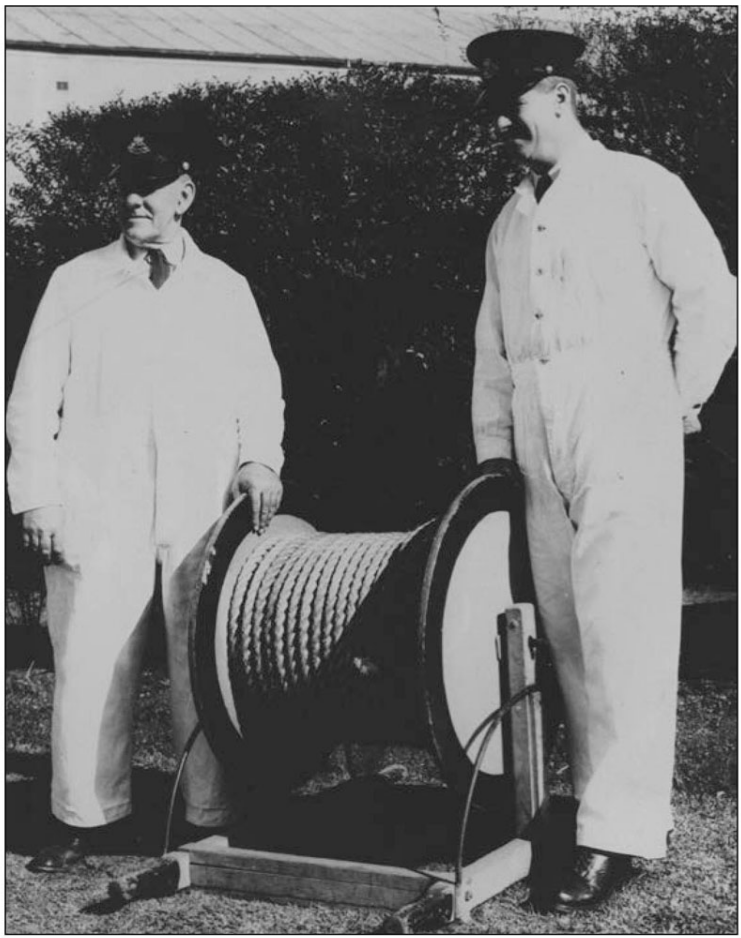
was stationed in eastern Sydney (and later some police based in the Blue Mountains and at Newcastle). In recognition of this increased workload, Ware was paid a small stipend and in 1945 was described in the department's annual report as a cliff rescue instructor.[43]

Ware did not deliver the training alone. He initially relied on assistance from a small number of NES personnel and subsequently what he called his 'keymen'. These were constables who demonstrated natural aptitude and a genuine interest in the work and tended to be called to most incidents. While records no longer exist as to the identity of all these men, it is known that over time the initial group transferred to other duties. In late 1944 though, a new keyman joined the squad – one who would come to play a crucial role in the development of police and other rescue services in NSW.

Raymond 'Ray' Tyson had been a qualified accountant who joined the Force in June 1940 and was posted to a mix of duties such as general policing, school lecturing and motorcycle patrols. In April 1944 he was granted leave to join the Royal Australian Air Force (RAAF) in an ultimately unsuccessful attempt to qualify as a pilot or navigator. Tyson returned to the police in September and was posted to Paddington Police Station as a motorcyclist and roster clerk. Because of the posting and his age, he was also required to undertake cliff rescue training. Passing both the theoretical and practical training with flying colours, the 28-year-old found that he enjoyed cliff work and began to spend time at Ware's small office at the Redfern Police Depot. The office was no more than a previously disused single vehicle garage that housed NES civil defence equipment, and now a growing amount of roping kit assigned to the Police Cliff Rescue Squad.

The number of callouts for the squad slowly gathered momentum with one of the first prominent calls occurring towards the end of the war, on Saturday 26 May 1945. During the evening a car driven by a middle-age man (who had earlier that day been reported as missing), and with a young women passenger on board, plunged off an 85-metre cliff in the eastern suburb of Dover Heights. Police and searchers spent hours trying to find the vehicle and its occupants. One body was found floating in the ocean the following night, having been wrenched from the vehicle by the ocean currents. The car itself was then located wedged in a reef about four metres below the water. Called to the scene to assist, Ware and Tyson indicated they would need the support of a diver. The following day a diver and a military

launch joined the search, and recovered the driver's body. The car proved impossible to retrieve.



Harry Ware (left) and Ray Tyson standing next to a large roll of manila rope, several of which were used for the Cliff Rescue Machine. These rolls were so heavy that four people were required to lift them. This photo was taken sometime in the 1950s, after Ware had formally joined the NSW Police Force.

By war's end the Cliff Rescue Machine had undergone another (and final) modification. It had been discovered that the 2:1 mechanical advantage did not work well on the bigger cliffs. The movable pulleys and blocks were replaced by a fixed pulley for the rope at the base of the jib, and another one at the top of the boom. The machine was also now made out of tubular steel (galvanised steam pipe). Stronger than wood, the metal machine was stabilised

and secured by cutting a single two-by-one inch hole in the rock at the cliff top (in which the jib was placed). Provided the guy ropes were at the right tension and the posts were exactly aligned, the machine could easily support heavy weights (even something the size of a dinghy) without breaking or collapse. Cutting a small hole in rock was the preferred way to anchor the jib but it could also be secured using a base plate, which meant the machine could be set up on top of buildings or on sandy surfaces.

Later, in 1955, the *Bulletin* magazine published an article on Ware. In it, the author wrote:

> 'It impresses Harry as "odd" that three times he has taken a squad of men out to some cliff for training, and then suddenly found a real job waiting, practically a plumb-line drop from the point on the cliff-top where they have been setting-up their gear.'[44]

The first such occasion occurred on Wednesday 16 January 1946 at The Gap. During a training session the police were told by a passer-by that nearby a man was threatening to jump. Running to the spot, police saw the man sitting on a sloping ledge of rock just below the cliff's edge, about 90 metres above the crashing waves. Tyson immediately lowered himself (without rope) to the ledge and tried to reason with the male. After a few minutes the constable grabbed hold of man and a violent struggle ensued, with the latter trying to throw both himself and Tyson off the ledge. During this Constable First Class W.E. White reached down from the cliff's edge and grabbed hold of the man's clothing. This was enough to prevent both the man and Tyson from falling to their deaths, until other police lowered themselves and were able finally subdue the male. For their efforts both Tyson and White were awarded Bronze Medals from the Royal Shipwreck Relief and Humane Society. Tyson was also subsequently promoted to Constable First Class for his actions and White was given six months' seniority. The rest were commended for their teamwork.[45]

A training session focussing on how to grapple with people threatening to jump. This was decades before occupational health and safety regulations required police to wear harnesses, helmets and other safety equipment at cliff edges.

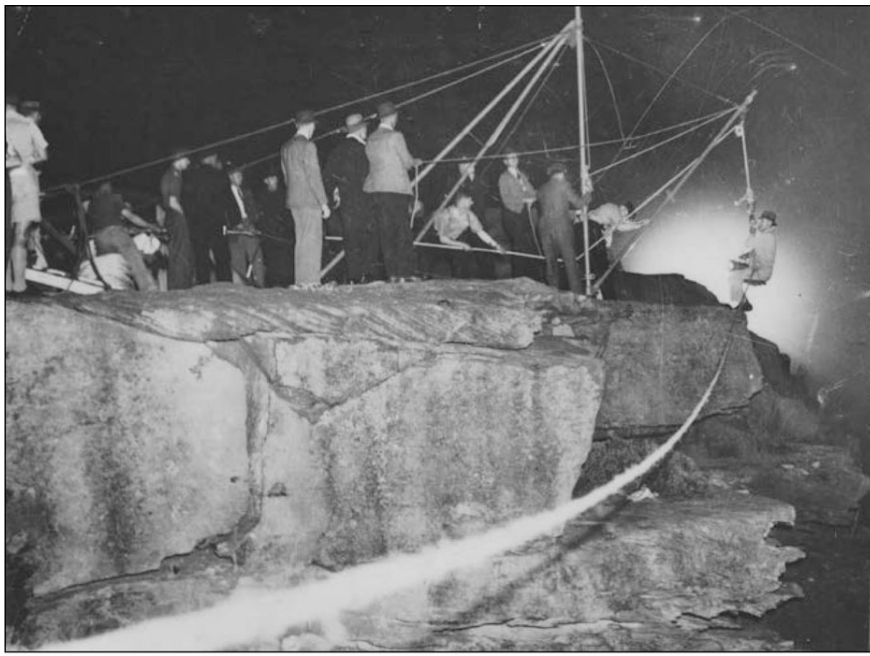
POST WAR OPERATIONS

At the end of World War II there was a determined effort on the part of the NSW Police Force to divest itself of most of the additional duties it had taken on during the 1939 – 1945 period. An exception was the work of the Cliff Rescue Squad. Harry Ware's talents and abilities were so useful (and Commissioner MacKay was such a fan) that the state's top cop asked the rigger to become a policeman.[46] Ware enthusiastically agreed but at nearly 50 years of age he was legally too old to join as a regular police officer. He was also too short, being five feet eight inches, whereas the minimum requirement was five feet 10 inches. As a compromise, the cliff rescue instructor was appointed a special sergeant on Monday 6 May 1946.[47]

Although he continued to lead the Cliff Rescue Squad, Ware was formally attached to the Police Depot (subsequently to be called the Police Barracks, the Police Training Centre and finally Police Academy). This was because administratively the squad did not formally exist, so it had no positions allocated to it. Ware's keymen (like Tyson) remained attached to their police stations, undertaking their substantive duties unless called upon for training or callouts. Later in 1946, the number of police trained for cliff work increased again with the formation of '21 Division' – a flying squad of select officers who drove radio-equipped vehicles and could move through any police district to focus on priorities set by the Commissioner.[48] One of their early roles was to support Ware in times of need.

Tyson's part-time status meant that he wasn't always available to attend calls and sometimes Ware would send other police below. The preference was to use police trained in the use of the Cliff Rescue Machine but this wasn't always possible. At dusk on Sunday 14 September 1947 for instance, the team undertook a body recovery operation at Dover Heights. In terrible weather and darkening skies Ware and a Probationary Constable K Viewey were lowered down a sheer cliff. At the bottom they scrambled across almost 200 metres of slippery rocks to retrieve the body of a 13-year-old boy who had fallen 23 metres to his death. Throughout their time on the rocks the two were lit by searchlights, operated by other police at the top of the cliff. After the two-hour operation Ware 'eulogised' Viewey for his help.[49] Six days later the young policeman rescued a boy trapped on

scaffolding about eight storeys off the ground at Sydney's Dental Hospital in Surry Hills.



A night-time operation underway at Dover Heights in the 1940s with a mix of uniform and plain clothed detectives operating the Cliff Rescue Machine.

Ware soon developed an intimate knowledge of Sydney's many treacherous cliffs. Invariably he and his team would be called out in foul weather or at night, so he liked to train frequently at as many locations as possible. He was relentless in his training techniques, routinely putting his charges through the most rigorous exercises on the Cliff Rescue Machine to ensure they were not acrophobic. Training usually involved him personally demonstrating the safety of the machine by being hoisted above a cliff and then (while strapped into the bosun's chair with a thick leather strap), invert himself to prove it was impossible to fall out. He similarly slipped forward to show how the strap would catch the armpits to prevent falling. He then sent out trainees one-by-one to sit and move around in the chair. Ware later reflected:

> 'I never force a man to go over the top if he doesn't want to, but I pick the toughest and most inaccessible spots for training.'[50]

The power of the ocean is clearly shown in the background of shot of Harry Ware and a policeman sharing the bosun's chair during a training exercise.

Training aside, the amount of actual rescues or body recoveries was steady if not dramatic. For instance, records show that in 1947 the team officially attended nine emergency calls, though there was actually more:

> 'In the early days there was no thought of recording information – it was a case of "there is the job, get to it" and when it was completed it was forgotten.'[51]

During his downtime Ware was allocated extra responsibilities and this marked the beginning of an expanding remit into what is now called operational support work. Initially the special sergeant was made responsible for the maintenance and deployment of wooden police barricades used at demonstrations and large parades. Additionally, he performed errands and so-called foreign orders[52] for the commissioner and other senior officers. Over time Ware also acquired a variety of tools such as oxy-acetylene cutting equipment, lighting equipment and an ex-army generator. While the searchlights weren't always useful for cliff work, they were used often to light up crime scenes for detectives.

In 1948 the Rescue Squad performed 18 rescues[53] along with a number of police support and body recover tasks away from the cliffs of eastern Sydney. In August that year they recovered a body from a

dam in Parramatta – their first still-water body recovery. The police and their Cliff Rescue Machine were also called upon often to help engineers from the Water Board descend into sewerage outfalls to conduct structural inspections.

By the late 1940s the Rescue Squad had a wooden dinghy to use for search operations along inland waters and rivers. Ray Tyson is manning the oars on this occasion. Lacking adequate funding, this and another wooden dinghy were used until they were literally condemned as being unseaworthy. It would not be until the 1960s that the Rescue Squad would obtain an aluminium dinghy, and the early 1970s before they were allowed to purchase an outboard motor for it.

The most technically challenging operation Ware undertook in his police career occurred on the night of 27 and 28 November 1947. A man's decomposing body needed to be recovered from the base of Govett's Leap, a 275-metre cliff located 100 kilometres to the west of Sydney, near the township of Blackheath in the Blue Mountains. The length of the drop required over 365 metres of the thickest manila rope the squad possessed. To get that length, two 230-metre lengths of rope were manually spliced together by Ware and Tyson at the top of the cliff, before it was fed into the Cliff Rescue Machine and then lowered over the side. To add significant complexity, a flying fox arrangement had to be constructed at the base of the drop due to the position of the body. The rope haulers relied on four snatch-blocks

and large trees for purchase but the strain proved so great that the rope was also tied to the squad's truck, which was used to haul Ware and the body up. It had been initially estimated that it would take a team of 20 men eight hours working in relay to recover the body. With his innovative use of the rope and flying fox, Ware and a dozen men did it in two hours from the moment the sergeant began his descent.[54] Ware's actions were personally witnessed by the coroner who later congratulated the policeman on a 'hard and hazardous job well done':

> 'The general public do not realise the risk taken by the Police when recovering bodies in these mountains of ours.'[55]

Earlier that year, on Wednesday 26 March 1947, the Rescue Squad was called out to The Gap not to rescue someone, but to demonstrate their abilities to Justice Stanley Taylor of the Industrial Commission of NSW. Senior police were pressing for a pay rise and part of their argument included being responsible for specialist teams such as the Cliff Rescue Squad. Ray Tyson remembered the demonstration vividly:

> 'The day that was chosen, it rained cats and dogs and there was some doubts as to whether we should do it and I said "well we work in the rain anyway so why don't we do it now?" . . . (so) we put on a demonstration for them. ... They came back and said "no, there is no danger in this," that we were trained and we knew how to do it!'[56]

Two years later, on Monday 4 April 1949, Justice Taylor heard a similar claim put forward on behalf of non-commissioned officers. The judge was again invited to witness a demonstration, this time near Katoomba Falls at the Jamison Valley in the Blue Mountains. Perhaps remembering the unfavourable outcome after the previous display, Ware made a point to invite Justice Taylor to experience the cliff machine close up. In front of a large crowd including reporters the judge somewhat reluctantly accepted and was lowered and raised 50 metres while strapped to a bosun's chair. Asked whether he enjoyed the descent His Honour replied:

> 'Let's say I enjoyed getting back to the top.'[57]

Justice Taylor putting on a brave face while being hoisted over the Jamison Valley.

SEARCH AND RESCUES

Another significant development in the squad's history was its first search and rescue operation, carried out near Bulli (between Sydney and Wollongong) on Monday 2 December 1946. During the previous evening a male visitor to the area was seen leaving a pub situated near the top of Panorama Lookout. Patrons thought they saw him walk into the darkness of the viewing area of the lookout, and not return. Fearing the man had jumped or fallen off the cliff, the licensee called police. Unable to find the man during the night, the police called for the Cliff Rescue Squad to coordinate the search and if necessary, recover the body from the bush at the base of the mountain.

Police in NSW had long assumed a leadership role in search and rescue; it has been 'always part and parcel of general duty' policing in Australia.[58] One of the first recorded and notable such actions in NSW was when Dr Robert Wardell went missing on his 800 hectare bushland property at Petersham on Sunday 7 September 1834. Wardell had been the first man admitted to the Sydney bar and was co-founder of the original *The Australian* newspaper. Though subsequently found murdered, the police had been involved in the original search and then organised the hunt for the offenders. A mounted police unit caught up with the murderers (escaped convicts) at an isolated property at modern-day Punchbowl. Two were hung.

By the mid-20th Century search and rescues were commonplace for police in rural areas. For Ware and Tyson however, it was something totally new. The two and their team searched for a full day for the man but could not find him or his body. They struggled to implement a systematic search process in the thick bush, that evening they were planning their next moves when they received news the man showed up at his place of work in Sydney 'amazed that anyone should have suspected that he contemplated jumping over the cliffs.'[59]

This experience taught Ware and Tyson a valuable lesson. As a resource, they were potentially useful to local police commanders who did not want to commit their own officers for extended periods of time. Yet the two were personally unprepared and inexperienced in bushcrafts. If the squad was going to have a search and rescue role,

they had to learn the basics from experts. The two sought help from the experienced bushwalkers at the Federation of Bushwalking Clubs' Search and Rescue Group (itself formed in 1936). During the course of multiple weekends over several months the bushwalkers and police gathered for training and rehearsals. This built a high degree of trust and respect and the police became much better prepared for navigation, map reading and other basic bushcrafts. The theory learned was put to the test in subsequent years, often in joint operations with their mentors, in rugged bushland to the north, west and south of Sydney. Within a decade the squad developed a reputation for being savvy search and rescue operators, and were often called hundreds of kilometres from Sydney to help find lost bushwalkers.

Harry Ware (front), Ray Tyson (right) and others carrying a victim in a Neil Robertson stretcher.

A PROMINENT PROFILE

From the second-half of the 1940s onwards the actions and abilities of the Cliff Rescue Squad caught the attention of Sydney's public. Crowds routinely flocked to witness cliff training or to look on with morbid fascination during an actual operation. The police stood out not just because of the work they did but also for the distinctive (even iconic) white overalls that they came to wear over their standard police uniforms. By the early 1960s the overalls also had the words 'Police Rescue Squad' sewn across their backs (see Appendix C: Rescue Uniforms).

Possibly the most macabre instance of an audience crowding around the Rescue Squad occurred in August 1955 at Victoria Park, next to the University of Sydney. Police spent almost five days searching the park's pond and other nearby locations for the body of a six-year-old boy reported by playmates as having drowned. Firemen were even called by Ware so as the pumps on the fire engines could be used to drain the pond. Newspapers reported over 1000 people milling at the pond's edge on Sunday 14 August, picnicking and frolicking on a sunny winter's day at the same time as watching police crawling through the muddy reeds and using poles to poke into the thick, all consuming mud. As the crowds milled at the edge of the pond, the boy's mother also stood at the edge, maintaining a lonely vigil.

The following Tuesday an estimated 2000 people visited the site during their lunch breaks. Ware's team worked for almost 16 hours a day, each day, searching and re-searching the pond as well as nearby ponds and water-filled brick pits in several inner-city suburbs. Detectives commenced investigating the possibility that the boy had been abducted but on the afternoon of Wednesday 17 August the boy's friends confessed to police they had actually been fishing in a water-filled trench in the nearby suburb of Redfern. There the boy's body was promptly located, hidden and pinned under a beam that lay across the trench. Ware and his team recovered the body.

A crowd gathering to watch the police team that is scouring the drained pond.

There was a genuine public interest in the police's grizzly work and newspapers often provided in-depth reportage of operations, including dramatic images of Ware and his team in action. The copy was riveting not just in the competitive Sydney newspaper industry of the 1950s, but to other papers throughout the nation. Usually, the focus of the articles was on Harry Ware. This occurred in media reporting of the sinking of the ketch *Gentleman's Agreement* on Tuesday 11 July 1950, on rocks to the south of Sydney near Wattamolla. The vessel's owner, a 23-year-old English heiress, drowned and her body became trapped in the wreckage. The other person on the yacht at the time, a young man, was washed into the ocean but managed to survive and struggled ashore twice (the first time falling back into the ocean when he fell down a cliff). After climbing to the top of the cliff and stumbling through the bushland, the man raised the alarm at the first house he came across (which happened to be the home of the NSW Deputy Premier).

Ware and his team had been training at Watsons Bay at the time so they were able to quickly race southwards. About a mile from the cliff their truck became bogged in deep mud, so the police had to manually carry their heavy equipment the rest of the way. While

setting up the Cliff Rescue Machine, one of the constables partially slipped down the cliff edge when some rocks gave way. He was grabbed by his colleagues and pulled to safety. Once the machine was erected Ware was lowered to the rocks and began a lengthy search for the body amidst the largely submerged debris. Huge waves swept the sergeant into the ocean on several occasions, each time he was saved by the squad pulling on a rope tied to his midriff. After three hours of fruitless searching Ware was eventually hauled to the top 'on the point of collapse.'[60] So popular was the Rescue Squad in the media that the story of Ware's unsuccessful search made the front page of the following day's *Sydney Morning Herald*. The survivor's arguably more remarkable story was placed on page three.

This photo gives an idea of the crowds that routinely gathered to see the Cliff Rescue Squad in action.

Even suicides, which were not normally mentioned by the press unless the deceased was someone noteworthy, were given discrete coverage if Ware and his team attended the scene. A body recovery operation on the evening of 24 June 1950 for example was described by the *Sydney Morning Herald* as a 'perilous descent.'[61] In raging

tempest conditions in the late afternoon a husband and wife walked along the edge of high cliffs near Avalon, in Sydney's Northern Beaches area. The husband later told police that his wife (who was recovering from a nervous breakdown) was picked up by the wind and fell down the 120-metre cliff. Ware, Tyson, other keymen in the squad, along with members of 21 Division, were called out and arrived at the scene around 9pm.

Using searchlights, Ware's team could see the body at the base of the cliff, at risk of being washed into the ocean and lost forever. It was agreed that a recovery attempt would be made however the ferocious winds and loose shale along the cliff top prevented the use of the Cliff Rescue Machine. Further, the howling winds made communicating (even with whistles) almost impossible – especially given the hauling party would have to stand well clear of the edge because of the shale. Ware withdrew to his car to think:

> 'I didn't want anyone to come over with me ... I puzzled over how I could do it alone. The savagery of the wind and seas was the problem. The whole task seemed so impossible ... [so] I sat in the car alone, taking no heed of the storm, and tried to think up every dodge and trick I had learned in the game – not to make the job safe, but to make it possible.'[62]

The sergeant emerged from his car to brief his team of waiting (and shivering) constables. He decided he and one of them would be lowered to the body on a line of rope, one after the other. Together the two would secure the body to a stretcher and then one of them would walk the stretcher back up the cliff, with the hauling party (led by Tyson), pulling the load up. When the wind proved too dangerous for the less experienced constable to descend safely, Ware went alone. It took around an hour to travel a distance that in calmer conditions took seconds. Buffeted by the strong winds Ware had to gingerly navigate the cliff with chunks of falling shale narrowly missing his head. When he reached the woman's body a large wave threw Ware against the rocks. He recovered and began to lash the body to his, using a short length of rope. This proved to be a lengthy struggle:

> 'It was not pretty, there in the darkness. Sometimes I was struggling with the woman's body as the seas washed about us ... at other times, I was fighting her, as bigger seas made her seem a live thing once more, trying to wrench herself free of

> my embrace. I think I almost preferred the darkness to the lights from above, for when they shone on me, they shone also on the dead woman's face'.[63]

After an ascent almost as lengthy as his passage down, Ware (with the woman's body tied to his) reached a small ledge about 15 metres from the top. Having blown his whistle for the hauling party to pause, the policeman untied the woman's body and placed it on the ledge so as he could take a few minutes to rest. The 54-year-old then realised his rope had snagged above him. With about five metres of slack between him and the snag, the Ware moved along the ledge to see if he could free the rope. Suddenly the ledge gave way and he fell the five metres before the rope jerked, hurting his back and smashing him against the rock face. Above, saturated and in pitch-black conditions, the tired hauling party were confused and initially unable to make sense of what they were feeling through the rope jamming, slackening and then jerking. Some feared Ware had fallen to his death and uncertainty reigned. Fortunately Tyson barked orders to the group to not let go of the rope. Despite being badly winded, the sergeant was able to again blow his whistle, and the hauling resumed (for the fall had ironically cleared the rope jam).

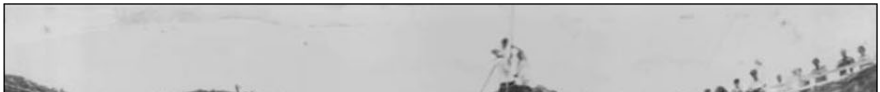
After again tying the woman's body to him, a totally exhausted Ware was pulled onto the top of the cliff around 1am. He then rested for a while under the squad's truck, no doubt reflecting on how close he had come to death. The policeman later told a magazine reporter that the episode was the worst job he attended.[64] Nevertheless, his actions were formally acknowledged two years later when he was awarded a British Empire Medal for Gallantry, the last award to be announced for an Australian before the death of King George VI.

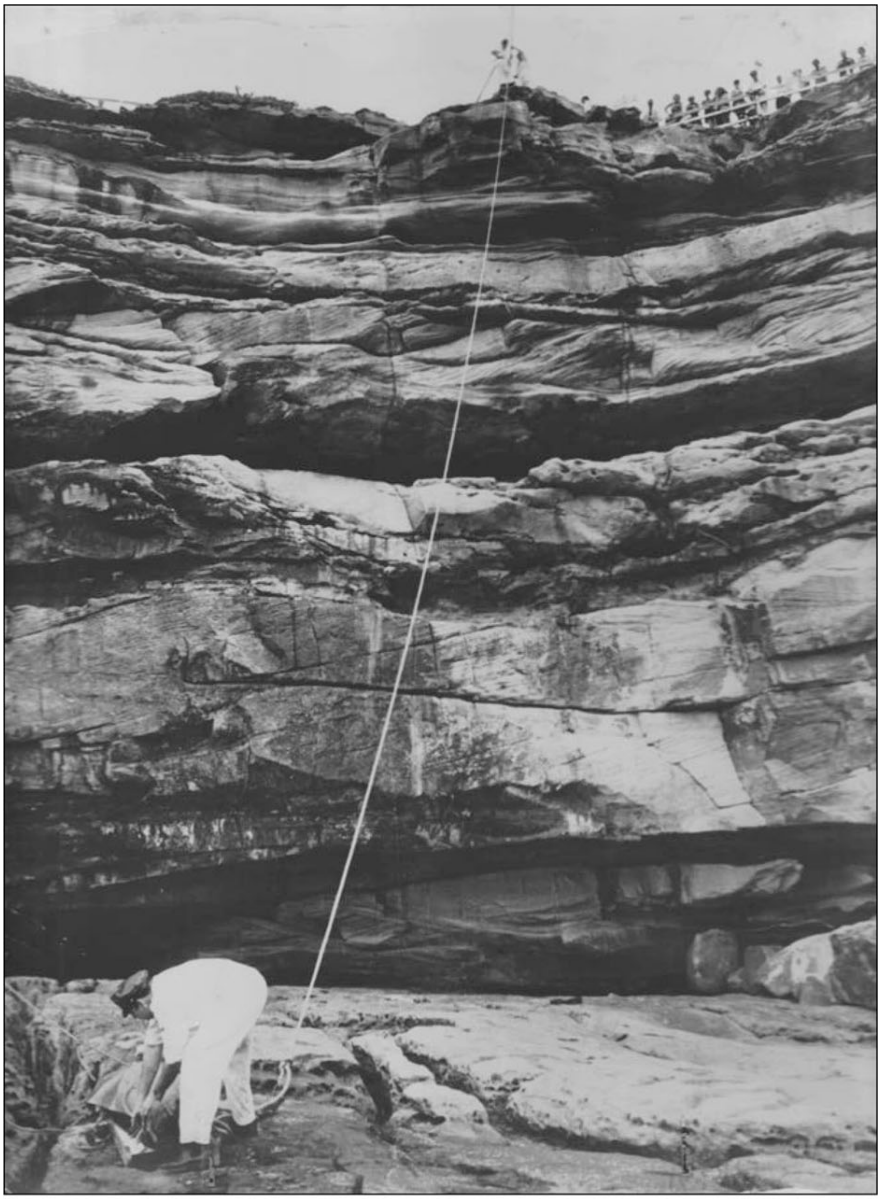
Harry Ware standing on the stretcher ladder while Bill Fahey begins to swing the boom towards the cliff top. Note the large leather belt used to keep the police rescuer attached to the rope while riding the stretcher.

The Avalon incident was not the only instance in which Ware physically tied himself to the body of a victim. In seemingly equally atrocious conditions, the sergeant was lowered to retrieve the body of a nurse from the base of Jacob's Ladder. The surf, wind and rain buffeted and savagely assaulted both the rescuer and victim. On this occasion the winds also tossed around the ladder stretcher in the air and into the ocean, even when the victim's body was tied to it. Ware

tried stabilising the stretcher by adding his weight but had to tie himself to the body and then also stretcher to do it. While ascending the winds also grabbed hold of the stretcher several times, each time thrusting it and its occupants up the side of the cliff. The danger for Ware was the heightened risk that they would be smashed against the rocks, or that the rope would break when the wind gave way and gravity returned. Even when reaching the top, he was again tossed into the air, this time partially above the cliff top – the only time Ware was almost blown back over to the top of a cliff.[65]

Sunday 18 October 1953 was a day almost made for newspaper reporters desperate to write up exciting stories. Two tense cliff rescues occurred in the same afternoon, one at Vaucluse and the other at The Gap. Each took hours to complete. The first involved a 17-year-old student who climbed almost all the way to the bottom of the cliffs in search of marine specimens when he stumbled, fractured his left arm, dislocated his thigh and suffered multiple cuts and shock. As he was preparing to be lowered down the cliff,[66] Ware was advised that a fisherman had been swept off the rocks at the bottom of The Gap and also required assistance. With only enough equipment and men to undertake one rescue at a time, the team prioritised their efforts. Unfortunately for Ware, freak winds smashed him against the rock face during his descent. At the bottom the injured policeman still had to walk for a quarter of a mile to reach the youth and those present who were comforting him. Carried in a blanket back to the waiting ladder stretcher, the semi-conscious student and Ware were then slowly raised to the top. Once there, both were conveyed to hospital. Tyson then took command of the squad and they relocated to The Gap. There the senior constable was lowered to retrieve the badly injured fisherman who had been comforted for hours by a Constable Turner of Vaucluse Police Station and Ambulanceman Les Medley. In total, over 30 police were involved in the two rescues along with members of the public and ambulance crews. Ware was discharged from hospital that night but spent several days off work; both victims recovered in due course.





An unknown police rescue operator recovering a body at the base of a cliff while above, colleagues and the public watch on.

In addition to being regularly mentioned in Australian newspapers and magazines, in 1958 the squad were featured in an episode of an American television show called *Danger is My Business.* The 30-minute documentary focussed on Ware and (to a lesser extent) Tyson. It

showed cliff rescue training at The Gap, the squad at their Redfern base, and simulated cliff rescues at places including Jacob's Ladder and Panorama Lookout at Bulli, to the South of Sydney. Even to a modern viewer the documentary provides a fascinating insight into the use of the Cliff Rescue Machine and the rudimentary technology then available to rescue operators. It certainly reveals the speech idioms of the era, including one section where the commentator refers to a training scenario of police dealing with a person threatening to jump of a cliff, as a 'suicidal maniac bent on destroying himself'.[67] While such a piece of dramatic prose may be somewhat insensitive by today's standards, the fact that what the show called the 'Sydney Police Rescue Squad' was featured in a prominent American television production, was a significant pop-culture honour for the time.

THE CATERING BUSINESS

Recognition brought on more diverse work for the small team, including establishing themselves as caterers for large police operations. For many decades the Force had provided hundreds of policemen to fight bushfires in rural and remote areas. As young and single police in Sydney in the post-war decade had to reside at the Police Depot, they were an ideal group to draw from in emergencies. The Force acquired 300 so-called firefighting kits, each consisting of little more than a pair of dark blue overalls and a large broom stick with strips of canvass at one end, to be used to beat out grass fires.[68] With this gear and whatever else they could carry, policemen would be sent out for days on end to fight fires. Ray Tyson remembered:

> 'Nobody ever made provisions for police, for their welfare (and) you had to look after yourself.'[69]

In the late 1940s Ware and Tyson were regularly sent to support firefighting operations, they and their vehicles were used to transport equipment and act as gophers for senior commanders. In the bushfires of November 1951 alone the two spent almost 90 hours over nine days supporting firefighting and policing operations. A few months later, on Friday 25 January 1952 they deployed south of Sydney to a bushfire in the Engadine area where they assisted in evacuating residents from homes at risk of destruction from the fires. The following day's newspaper featured a photograph of Harry Ware carrying a somewhat reluctant 84-year-old woman from her home.[70]

Over time the men began to convey refreshments to frontline police at bushfires. It started with performing water runs and then taking cakes and soft drinks that had been made and donated by anxious local residents. Though not necessarily nutritious, the sweets were always well received by tired and hungry police. This got Tyson thinking and one day he suggested to Ware that they stop by an inner- city milk factory and a pie manufacturer, to seek donations. Both businesses were happy to oblige and the squad delivered cold pies and even colder milk to tired police. The effort was a great success and came to be repeated often. Ware was also able to acquire an old electric pie warmer and converted it to kerosene power, so it could be set up and operated from the back of their utility. Two

second-hand steel metal bed bunks were purchased with their angle iron steel frames welded into the frame for a BBQ. Metal plates and cookers were also obtained, as were large second-hand army Bunsen burners that were modified to be able to boil almost 20 litres of water in 11 minutes. With this improvised set-up, the Rescue Squad quickly became relied upon to keep police in the field fed and watered.

Harry Ware issuing milk to police and soldiers during bushfires near Wedderburn, 3 January 1957.

So successful was the venture that in 1955 the team acquired a 1942 Dodge truck that had been used by the RAAF during the war, before being allocated to the Force's radio unit known as VKG.[71] VKG retired the truck in 1955 as it had reached the end of its operating life. Clearly well passed its best, the truck was nonetheless pressed into service once more. Allowed to spend only £12,10s to convert the truck into a mobile canteen, Tyson along with new squad recruit Constable William 'Bill' Fahey begged, borrowed and procured equipment for the fit-out. The two painted the inside of the rear compartment, installed their improvised BBQ and the pie-warmer (including converting the latter back to electrical power). This 'new' canteen was an instant success, feeding 300 police on its first outing.[72] The following year the truck was used at nine separate

incidents, each requiring the feeding of large numbers of police.[73]

Though it was a valuable service, the catering function remained an auxiliary role for the Rescue Squad. On a number of occasions during the 1950s and 1960s rescue operators were redirected from catering operations to attend an unrelated emergency. On Sunday 16 December 1951 the men were called away from a bushfire at Richmond (to the northwest of Sydney) to recover the body of a woman found near Whale Beach at Sydney's Northern Beaches area. On Tuesday 9 March 1965 the squad were conveying food to police at a bushfire when they were diverted to rescue a man trapped in a lift in Sydney's Central Business District. One series of catering operations that the squad were not called away from though, was when they fed over 300 police per day for three days, from 18 to 20 June 1964. This operation was in support of the substantial policing effort to control the crowds of youths that flocked to concerts by the rock band The Beatles.

Constable Jack Knight from the Police Rule Book Section at Redfern became the Rescue Squad's first canteen supervisor, called upon in the late 1950s and early 1960s at the more protracted catering missions that could not be staffed by either Tyson or Fahey. Calling on part-time members such as Knight was essential due to the considerable logistical challenges involved in running the canteen. Food had to be acquired, prepared, cooked and served in the field, often in remote or difficult to access areas, or on weekends and public holidays when shops were shut. Sandwiches, meat, salads, cakes and fruit, along with tea and coffee, could all be provided – at a cost. Whereas acquiring foodstuffs in Sydney was easily manageable through known distributors or even the Railways kitchens if there was sufficient warning of an upcoming operation,[74] short-notice operations in country areas required the squad to quickly establish new relationships with local providers, and to arrange for the purchase of food on credit. This could be a difficult task, particularly given the need to produce meals to a tight budget.

The Police Rescue Squad's canteen in operation.

By the early 1960s the Dodge literally began to rust through. With no other option, and partially in protest at the department's initial refusal to replace the vehicle, the Dodge was left in a state of

disrepair outside the offices of senior police at Redfern. In time a replacement vehicle was authorised – a new long-wheel base Austin delivery van. Painted ship grey and modified to enable food to be served through a side window, the van also had a rear door modified so as it could be reconfigured as a large table when required. Mechanically the van was a marked improvement on the Dodge but it still had limitations – no internal refrigeration unit, limited storage space and no in-built hot plates. Cooking had to be undertaken away from the van, under a cloth marquee that was normally stored inside the vehicle's rear compartment. Further, if large amounts of food were required or if the warm weather risked sending fresh food stale, the police had to find appropriate storage facilities at or near the cooking site. On more than one occasion the police relied on the goodwill of local businesses that could spare space in their premises, a less than ideal option that caused angst in a unit whose ethos was to be self-reliant.

The Austin van towards the end of its service.

In March 1969 the Rescue Squad applied for funds to acquire a large purposely built caravan with sufficient space for a serving area, kitchen, refrigerator and cupboards. With a generator, batteries and gas bottles to be stored on board, the caravan would significantly

increase the efficiency of catering operations. A caravan and the Austin would also enable catering to be provided concurrently at two operations, or at two locations at the one operation.[75] Approval was eventually given in 1973 and the caravan augmented the squad's vehicle fleet, which by then also included three ex-military trailers, two of which had mobile Wiles steam cooking units constructed on them. The third trailer was a small water tanker used to provide non-potable (but boilable) water for police at forward command posts or other locations where food and refreshments were served.[76]

In October 1973 Constable Neil Turley was posted to undertake crowd control duties on Macquarie Street, Sydney, during a visit by Her Majesty Queen Elizabeth II. He later recalled:

> 'Having stood on duty from 6am until 10pm, I was fortunate enough to have a police vehicle pull up alongside me and out of the window a hand passed me a cold meat pie, then an apple then a piece of fruit cake cut straight off the block.'[77]

The hand belonged to Bill Fahey and several years later Turley found himself working with him at the Rescue Squad, as canteen supervisor. Turley's main role was to maintain canteen equipment and either have sufficient food stocks on hand for a callout, or be able to obtain food at short notice. He was also responsible for maintaining both the caravan and a nine tonne International truck with a specialist mobile kitchen and storage facilities attached to its rear, purchased by the Force in the late 1970s and used until 1994.

The numbers of meals that the squad were required to provide each year continued to grow; hundreds a day had to be made for police during a series of protracted prison warden strikes in the late 1970s through to the mid-1980s. Sometimes called by wardens at short notice, the strikes resulted in police undertaking a guarding function for extended periods, the longest strike lasted for 33 consecutive days. In some instances the prisoners (confined to their cells) were able to create disturbances or set fires, resulting in pandemonium. Throughout this the Rescue Squad kept police fed, while Salvation Army field kitchens fed the prisoners. Another notable catering event occurred in November 1986 when Pope John Paul II spent 36 hours in Sydney, during which time he led an open-air mass for 200,000 people in the Sydney suburb of Randwick. About 4,500 meals were provided to police, and at another event during Sydney's Bicentennial celebrations in 1988, 7,500 meals were

prepared, cooked and served.

All members of the Rescue Squad assisted in the canteen from time to time either preparing, cooking or serving meals, but it was not unusual at large events to call on police from outside the unit to help, or even wives or partners. At the above Bicentennial event for instance, Turley and Constable Allan Forrester were assisted by six general duties constables who had been volunteered and who claimed they had never cooked a potato in their lives.

The Rescue Squad's industrial kitchen at its Marrickville base in the 1980s. Alan Wade (left) and Rod Stewart preparing meals, with the assistance of two women (identities now unknown).

The most protracted catering operation undertaken was the provision of lunches to the police who provided security at Penrith's courthouse during the hearing and trials relating to the infamous Milperra Bikie Massacre – a brawl and gun battle between gang members on Sunday 2 September 1984. The massacre resulted in the violent deaths of six bikies and a 14-year-old girl, and injuries to another 28 people. On-and-off, the court cases lasted for most of the period between October 1984 to June 1987. Each day the court sat, around 100 police were required to escort prisoners and provide security to the court and its precincts. And on each of those days

Turley or other Rescue Squad members would travel to Penrith (around a one-and-a-half hour's drive from the squad's Marrickville base) and work from a borrowed caravan that was set up behind the police station. Police were fed lunch in two shifts and Turley later reflected on the overall length of the operation:

> 'It took so long I watched the creation of a school house, a hospital and a complete housing complex.'[78]

A common sight at any major or sustained police operation from the mid-1970s to 1994. Rescue 5 - the canteen truck – set up to serve meals to police, volunteers and other emergency personnel. Although it was somewhat awkward to drive, the vehicle was the most advanced truck the squad ever used for catering operations – its rear specifically designed to enable food to be stored, cooked and served.

Throughout the Force there was a general sense of appreciation for the service the Rescue Squad provided, although sometimes the food did attract complaints or wisecracks. The fruitcake favoured by the squad for example was nicknamed 'yellow cake' because of its colour and staleness if it had been left out for hours. Squad members also discovered what chefs around the world have always known in relation to serving food, they could not please everyone all of the time. Nevertheless, the canteen was an institution within the police in an era before the prevalence of all-day fast food outlets. For all the complaints grumbled by some, the food produced was eaten in vast quantities. For police commanders the canteen brought the added

benefit of being an economical alternative to paying meal allowances to police at large operations, especially given it was not unusual for the Rescue Squad to produce over 40,000 meals a year.

THE SQUAD CHANGES ITS NAME AND GOES FULL TIME

By the mid-1950s Ware and Tyson had trained 200 police from the eastern suburbs, along with some officers from the Dee Why and Manly stations, in basic rescue techniques.[79] The Cliff Rescue Squad itself however was considered to be just 10 strong; these were Ware and his keymen who undertook the more advanced training.[80] Ware and Tyson were at the core of the squad who more often than not, attended rescue calls outside of business hours but were not paid overtime. Many of the emergency calls seemed to come at night, sometimes twice nightly. Ware in particular believed the emergency worker's folklore that workloads increase during full moon periods, once commenting:

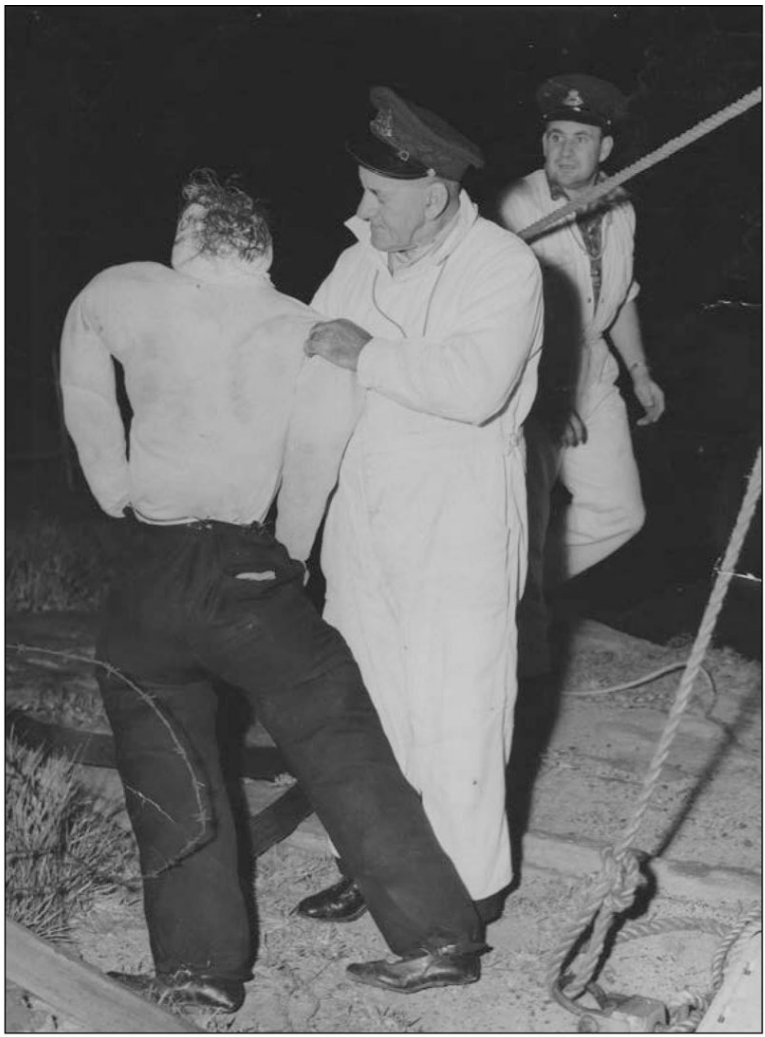
> 'Full moon probably turns certain people's minds ... most of our rescues are carried out after dark.'[81]

The growing workload meant that by the early 1950s Tyson was a full-time member in practice if not in name. Nominally he was still attached to Paddington Station but 'they hated me because I was on the roster and not there.'[82] Holidays for the two were rare and Tyson in particular found that he spent little time in raising his children.

It was obvious that additional personnel were needed on a full-time basis but the Force's hierarchy was unwilling to allocate them. From an organisational perspective the Rescue Squad didn't attend a high volume of calls while at the same time patrolling and combating crime was the organisation's main priority. The Force could put up with the inspector responsible for Paddington complaining about rarely seeing Tyson but they could not spare the position being transferred outright – books and figures had to balance.

Almost by stealth though, another constable began to spend more time at Redfern. Bill Fahey was a marine fitter-and-turner by trade and joined the Force in 1951. Initially stationed at Darlinghurst, Fahey completed his basic rescue training in 1953 and his natural aptitude for rescue work attracted Ware's attention. Nominated as a keyman, Fahey found himself posted to the Rescue Squad to backfill for either Ware or Tyson on the rare occasions that one of them took leave. Like Tyson, Fahey seemed to always have an excuse as to why

he was needed at Redfern but not at his police station. In effect, the team had grown to three full-time members.



Harry Ware examining a crudely made straw dummy, with Bill Fahey in the background. One evening the squad responded to a call of a man who had been thrown from a cliff near Jacobs Ladder. Ware was lowered to the scene only to discover it was this dummy thrown over as a lark by a group of young males. The incident was later recreated for the episode of the US television show *Danger is My Business*.

Fahey's joining coincided with a seminal point in the unit's history on two counts. Firstly, while the numbers of cliff rescue and body recovery calls continued to grow, the amount of non-cliff work for the team increased more rapidly. The diversity and amount of

work was such that it warranted a change in the unit's name. Already commonly referred to as the Police Rescue Squad, the formal name change occurred in 1953.[83]

The second pivotal moment was the decision to formally establish the Rescue Squad as a full-time unit, but this was only done after the Force seriously considered disbanding the team. There was no doubt that the team were a unique asset, a capability that was imitated by several Australian police forces in the 1950s and 1960s.[84] In their day-to-day operations the three men at the core of the NSW squad complemented each other well; Ware the rigger and the foremost authority on roping techniques, Tyson the accountant and administrator but also an accomplished rescue operator in his own right, with Fahey the mechanic and the squad's technical man. All three were physical, hands-on men. Ware and Tyson in particular were inventors – they designed and built many small items of equipment to assist them in their duties. Indeed the need for invention was manifest as for many years there was a scarcity of commercially available rescue equipment and the funds to buy it.

By the mid-1950s Ware had ceased to be directly answerable to the commissioner, his new senior officers were less enthusiastic in their support than the late Commissioner MacKay. For financial reasons the senior officers now responsible for the team debated whether they could transfer the rescue and support role to another organisation. The nature and tone of discussions was such that Ware, Tyson and Fahey each thought it was a foregone conclusion that the Rescue Squad would be disbanded. Ware was the most philosophical of the three; he was almost at retirement age and had not been keen about performing some roles such as road rescues.[85] Tasked by police command to do so, he spoke to senior fire officers and the heads of Sydney's various ambulance services.[86] None however were interested in taking on the role, nor did they plan to acquire the type of equipment that the police unit possessed.[87]

Faced with no other rational choice, the Force made the important administrative decision to establish the Police Rescue Squad as a permanent unit with effect from Monday 27 October 1958. There was a bureaucratic irony in the action though. While the department had acknowledged that the team required extra resourcing, only Tyson and Fahey were transferred. The decision merely gave effect to the reality that the two constables were working at Redfern permanently anyway. So, no extra personnel were

transferred but the Force continued to endorse the practice allowing keymen to fill in for Ware, Tyson or Fahey when they were on leave.

In 1958 the Rescue Squad attend 51 emergency incidents and many more cases where they and their equipment were used to support other police units. The largest case that year was a multiple-day operation to provide catering, bomb search and general support during the visit to Sydney of Queen Elizabeth, the Queen's Mother. Another notable police support operation that year occurred when Ware was called out in the very early hours of 6 December 1958 to assist in the search for the so-called Kingsgrove slasher, a serial offender who broke into bedrooms in south-western Sydney to cut the clothes of women and girls who were asleep. Confronted by the father of a potential victim on 6 December, the slasher ran off into the night. Detectives sought Ware's assistance through using the squad's floodlights to light up the otherwise dimly lit nearby streets and parklands.[88]

The floodlights were also in used July 1960 to support the largest manhunt undertaken by the Force up till that time. Eight-year-old Graeme Thorne was kidnapped near his Bondi home when he was walking to school. Thorne's father had recently won a lottery and his residential address had been published in the newspapers. Upon reading about Mr Thorne's good fortune, a miscreant decided he wanted the money and planned to kidnap then ransom young Graeme. The abduction was botched however and Graeme soon died in the boot of the offender's car. It took police weeks to locate the boy's body, dumped in a vacant allotment in the northern suburb of Seaforth. His school bag and cap had been located nearby some days earlier and it was during that time that the squad and its lighting equipment, was used to search dense bushland.[89]

Harry Ware examining manila rope in the Rescue Squad's Redfern base – a large garage. Among the other visible items in the shed are oxy-acetylene equipment, helmets, tarpaulins, searchlights and lamps.

By the early 1960s the squad had also begun to assist in storm and tempest recovery work, often borrowing tarpaulins from the Civil Defence Organisation to help cover damaged roofs. Mostly the tarpaulins were stored at Redfern depot, an arrangement that suited both organisations. Further, as the Cold War intensified and societal concern grew about the risk of a nuclear war, the rescue operators were allocated a civil defence role that required them to travel the

state to deliver lectures and basic training to police, emergency workers and community groups. For both Tyson and Ware it was a flashback of sorts to some of the training they delivered during World War II.

The squad undertaking storm and tempest recovery work at a seaside suburb during the late 1960s. Note the signs painted onto the top of the canvas cover to the rear of the squad's truck.

ROAD RESCUE

Despite Ware and Tyson attending their first road rescue call at Taverners Hill in the 1940s it was not until the late 1950s that the unit obtained the type of specialised hydraulic equipment that is considered by today's emergency services to be essential for rescue operations. This delay was because portable hydraulics were not sold in Australia until 1955.

Two events spurred the squad into acquiring the equipment – tragedy and chance. The tragedy was the crash of two passenger trains in the southern Sydney suburb of Sydenham on Saturday 19 December 1953. It resulted in five passengers dying and scores more being injured. Large crowds flocked to the wreckage to either watch or join in the rescue effort. Sent to assist, Ware and Tyson found that their oxy-acetylene kit and abrasive saws were ineffective. The two ended up coordinating the rescue effort but afterwards the feeling of impotence particularly affected Tyson. He felt people expected the police, especially their Rescue Squad, to be able to do something. Mundane facts like not having appropriate rescue equipment were of no use in emotional arguments with the relatives of the trapped and dead.

Tyson's feelings were further reinforced just two days later when he and fellow squad member Constable Joe Beecroft, along with members of 21 Division, were called to a body recovery operation at a cliff located between Bronte and Tamarama beaches. A car travelling at speed had crashed through a safety barrier at the top of the cliff, before being violently bounced and flipped in its 60-metre plummet into the ocean below. Lifeguards on duty nearby were unable to recover the driver's body as it was jammed beneath the car's crushed roof. They were able to drag the largely submerged vehicle and rest it against the rocky ledge before the Rescue Squad and 21 Division personnel arrived. It took Tyson, Beecroft and their colleagues, three hours to free the body using crowbars, rope and some ingenuity. Some of the police had to strip to their underwear so as they could swim underwater, although each was tied to the cliff by rope to prevent them being washed out to sea in the metre-and-a-half swell. Once the body was retrieved it was lifted from the site via the Cliff Rescue Machine. Overall, it was another risky operation made

more dangerous by the team lacking adequate equipment to access badly damaged vehicles.

Months later, in an episode of chance, Bill Fahey was handed a document from a friend who worked for the Hospital Commission. It was an American sales pamphlet and catalogue promoting Blackhawk brand rescue equipment. On the back of it was a picture of American firemen receiving a so-called Blackhawk Lifesavers Badge for performing a certain amount of rescues with the kit. This had gotten many laughs from the employees of the commission but Fahey studied the equipment on offer and then showed the pamphlet to Ware and Tyson. The latter himself had earlier seen a picture of unknown rescue items in use with the New York City Police Department's Emergency Services Unit. Enquiries with the United States Consulate in Sydney revealed that Blackhawk products were sold under licence by an automotive spare parts company, George Sample & Sons.

Sometime in either 1956 or 1957, Tyson and Fahey went to the business in the nearby suburb of Mascot. There the two saw a salesman who had previously been Fahey's labourer from his days as a fitter and turner. The ex-labourer didn't know that the firm stocked most of the items in the catalogue, which were sold in Australia under the name of Porta-Power:

> 'Fahey and I went through it [the factory] and said "look we want one of these, and one of these (etc)" . . . and they put them in a [black] box for us.'[90]

The box contained an assortment of items, some of which had been on the shelves so long that they were covered in dust. The items included a large 'spreader' that could push apart objects, a small spreader (also known as a 'wedgie'), tubes, connectors and hoses to connect the items to a hand pump. Three jacks ('rams'), two plates to attach to the rams as well as a 'hinge foot' were also part of the collection. By current standards the equipment was a glorified home garage set[91] with the maximum load the large spreaders being ten tonnes.[92] Still, it was better than what the squad already had which was nothing. Nothing was also the amount of money the unit had, which fell considerably short of the retail price of £280.

Ware argued with senior police and bureaucrats for money to purchase the equipment, citing the types of incidents they had attended where it would have been invaluable. This was to no avail.

Statistics spoke much louder than actions to departmental bureaucrats and it was the time when the continued existence of the Rescue Squad itself was being questioned. In desperation Tyson and Fahey explained their situation to George Sample himself. In return for some publicity and an optimistic promise of future payment, Sample handed over the equipment. Like children with new toys, the two police went to car wrecking yards and practiced with the kit. The techniques Tyson and Fahey developed during these early days (later refined through operational experience) were focussed on enabling the safe extrication of victims while causing the least amount of damage to the vehicles. With only one of their hydraulic devices able to cut metal, the men refined ways to use the spreaders and rams to manipulate, wedge and push apart the metal components of vehicles. These techniques have remained largely unchanged and are used by rescue operators of all services to this day.

Bill Fahey later recalled:

> 'The first time we used it [the hydraulic kit] was when a big steel tanker rolled backwards onto a silver car in Burrows Road at St. Peters. We had been waiting with baited breath to try it out and picked up the Porta-Power rescue box and off we went. The driver of the car was trapped and the roof was badly crushed in. Harry Ware and myself were able to successfully release him from underneath.'[93]

Another collision in which the equipment was used was outside the abattoirs at Homebush on Wednesday 28 October 1959. A car and train had collided at a level crossing, resulting in the car being flipped onto its roof and partly crushed in. After prizing the car from the train with the help of the spreaders, Fahey was able to get to the driver:

> 'Every time we put pressure on him he bellowed . . . I said "what's wrong with you?" He said "my leg, my leg." So I searched his leg [and found that a] spring from [the] seat had gone in one side, out the other and wrapped around [his] bone.'[94]

In these early years, when there were no training manuals and ambulance officers could not use drugs to manage the pain experienced by victims, it was through experiences such as this where the rescue operators learned the brutal realities of conducting motor vehicle extrications. For this particular case Fahey used bolt cutters

to cut the wire protruding from both sides of the driver's leg. At the hospital, doctors removed the section of wire that had been left inside the limb.

The car involved in the crash at Homebush.

Other early incidents that the Rescue Squad used the Porta-Power equipment included a body recovery on Tuesday 31 March 1959, where the spreaders were used by Ware to gain entry into the tangled wreckage of a car that had plummeted 100 metres from the top of North Head to the rocks below. Soldiers from a nearby barracks helped Ware carry the equipment to the site and then carry the victim and equipment back up the cliffs. On Thursday 3 March 1960 the Rescue Squad and the Force's carpenter worked together using the spreaders to free a boy from an elevator that had been stuck in Kent Street Sydney.

As time passed and with the hydraulic equipment coming to be used on a weekly basis, Ware, Tyson and Fahey were able to provide proof to the department of the usefulness of the kit. George Sample eventually received full payment.

A police rescue operator being lowered down North Head to examine a sedan that had plummeted from the top of the cliff.

THE SQUAD'S FIRST TRUCKS AND THE Q-VANS

The evolution of the Police Rescue Squad during the 1950s and 1960s was a gradual but somewhat fitful process. Advances in one area of operations were sometimes offset by lost opportunities in another area, as emphasised by the squad's struggles to obtain purpose build rescue vehicles.

Since its inception the squad had relied on a mix of general-purpose utilities and light trucks, none particularly suited for rescue work. The very first truck had been Ware's GMC utility (an NES vehicle). Postwar the Rescue Squad first used a six-cylinder red Bedford one tonne truck. Ware designed, built and fitted an eight-feet-by-six-feet rear tray for the Bedford, with a black canvas cover that could be removed when required. Despite its size the tray was not big enough to carry every piece of equipment the squad regularly used, so almost everything was packed into boxes and stored at Redfern, loaded and unloaded as required. Further, because the main posts of the Cliff Rescue Machine were longer than the tray, they were carried on the passenger side of the truck (held on by hooks which were manually hung over the side). This required the passenger to jump into the truck before the posts were hooked on!

The rear tray was significantly wider than the driving cabin and when fully loaded, the truck was lopsided, fickle to steer and so weighed down that it 'wouldn't pull a hat off your head.'[95] This trait was made more interesting by a habit in heavy rain of the truck's distributor cap flooding from water that seeped through the vehicle's split bonnet.

The Bedford's replacement, an olive green coloured Ford F100 dual rear axel utility, was similarly beset by the challenge of being lopsided when its rear tray (the Bedford's tray refitted) was fully loaded. It also had substandard re-treaded tyres because of budgetary reasons. In addition to the Bedford and then the F100, Tyson and Fahey had access to the utility used by the Force's carpenter, but it was small and not available during business hours. Overall, it was not an optimal situation.

When he took on the role of Rescue Squad OIC, Tyson lobbied

strongly for a second truck in addition to the F100. He argued that one truck could be used primarily for cliff rescue work and the other for what was then called transport rescue (ie: road rescues). An additional truck would lighten the weights carried in each vehicle and would dramatically improve response times, as he and his team wouldn't have to attend Redfern to load or repack for each incident. His arguments fell on deaf ears and the squad had to make do with what they had. After all, it had only been during Tyson's police career that vehicles became widely used in the Force. In fact, the last patrol horses were only phased out of service in country areas in 1961[96] and as late as 1963 police officers in many rural districts were required to use their personal vehicles for official business.[97] Given this, just to have a truck issued for rescue work (even if it was underpowered, overloaded and with poor quality tyres) was considered good fortune.

While the Force did not actively seek a specialist rescue truck, the people of Sydney thought such a capability was required. Radio disc jockey and police roundsman Mr Gary O'Callaghan knew the team well and was very much aware of Tyson losing the argument for a second truck. O'Callaghan had seen first-hand the limited rescue resources available in Australia's largest city and he felt it was time for the community to unite to fill the gap. He announced that he would raise money through a public appeal to purchase a bespoke rescue vehicle with equipment, and donate it to the police. But Police Commissioner John Delaney flatly rejected the offer. The state's senior policeman indicated that as the responsibility for rescue belonged to the NSW Government, it alone would allocate appropriate resources to the police. This reflected a conservative view that the Force could not be seen to accept public donations.

O'Callaghan nonetheless proceeded with his plan to raise the funds on one of his Saturday radio shows.[98] The money was used to purchase the latest rescue equipment (as nominated by Tyson) and a long-wheel base cream-coloured Willys FC170 Jeep (recommended on advice from an American rescue organisation). Once it arrived in Australia from the United States, the jeep was sent to Melbourne where a rear compartment was built to specifications set by Tyson and Fahey. When it arrived in Sydney and was fitted out with the purchased equipment and a police radio,[99] the vehicle was promptly donated to the St. George-Sutherland District Ambulance service in southern Sydney. By agreement with Commissioner Delaney,

ambulance officers received training from the Police Rescue Squad before the commissioning of their new 'Res-Q-Van' (or 'Q-Van') in October 1961.

Bill Fahey demonstrating the use of hydraulic equipment to ambulance officers, during rescue training at the Police Depot. Assisting Fahey (in the white overalls) is a representative from the company that sold Porta-Power hydraulic equipment. Police rescue operators have historically worked closely with the private sector in adapting and perfecting the use of new equipment.

In 1963 the Newcastle District Ambulance Service also acquired a Willys Jeep for rescue work. Sydney's second Q-Van (a Toyota Land Cruiser) was purchased through fundraising in 1965 and stationed for a time at the Northern Beaches suburb of Narrabeen.[100] Subsequently other vehicles were acquired for various Sydney and regional ambulance services, purchased through public appeals and other fund raising methods. These ambulance units tended to be staffed in an ad-hoc fashion by a small number of proficient (some even outstanding) operators. The location of the vans meant that until the establishment of decentralised Police Rescue Units in the late 1970s there was only occasional operational contact between the police and Q-Van operators. An exception to this was along the cliffs and bushland of Sydney's Northern Beaches area where police and ambulance

rescuers often interacted. When they did work together, cooperation was professional and highly effective, in large part because of the warm personal relationships and respect for each other held by both groups.

What could have been for the police: the St. George-Sutherland District Ambulance Q-Van, which was operational for over 15 years. This image was taken after a comprehensive 1995 restoration of the van to its original colour and markings. The vehicle is now a museum piece.

HARRY WARE'S RETIREMENT

The end of an era came on Saturday 22 December 1962 when Harry Ware retired. He left the Force having suffered two heart attacks in less than two years. The first occurred on Monday 6 February 1961 and caused a coronary occlusion. After spending five weeks in hospital, the workaholic Ware was ordered by doctors to spend time at home to 'potter around'.[101] Several months later he returned to work against the wishes of his wife Dolly. In mid-1962 Ware suffered a milder attack and it was while recovering from that episode that he reached the compulsory retirement age of 65. Concerns that he would not have a pension (due to his special members status) were only remediated during his stay in hospital after the first heart attack. In February 1961 the government formally decided to give Ware the same superannuation and pension rights as full police members. That this occurred, and was reported on by the media at the time, indicated the esteem he was held in by the broader community.

Harry Ware with an injured woman and talking to police, while waiting for an ambulance. It was not unknown for the Police Rescue Squad to arrive at the cliff and carry out a rescue before an ambulance could arrive.

Ware had become a household name not just in Sydney but also in

many areas of Australia. A widely brandished nickname for him was either 'The Human Rock Spider' or 'The Rock Spider', for his abilities to manoeuvre and negotiate the cliffs without any demonstrable fear of heights.[102] He explained his apparent fearlessness in the following way:

> 'I am just as much at home going up and down a cliff as I am in front of a fire in winter – but I keep my eyes open a bit more. Whatever fear I had of height has disappeared with experience.'[103]

Ware had been given a significant degree of latitude (if not resources) to form and lead the Rescue Squad, and had made it his sole focus in life. As an inventor and a person who habitually tied knots with loose pieces of rope, Ware mixed candour with humour to ram home points with his colleagues. Bill Fahey remembered Ware as being 'not amenable to discipline' himself,[104] yet if a recruit gave him lip, or foolishly aired a false sense of confidence, the sergeant found ways to bring the reprobate down to earth. One of his favourite tricks was to insert a short, teased piece of manila rope into the Cliff Rescue Machine and then put the problem student in the bosun's chair about five-and-a-half metres from the edge of a cliff and over 30 metres from the bottom. Ware would then shout out to the student that he had found a problem and then keep the man in suspense while they slowly returned him to terra-firma:

> 'I've seen the hardest coppers in New South Wales Police 21 Division go white, you could see the knuckles tense.'[105]

Above all else, Ware espoused teamwork and knowledge. Trusting each other and knowing the limitations of one's equipment, ensured success: anything less resulted in failure and possible death. He was a natural and talented instructor, a risk taker, an inveterate showman and in many respects a 'force of nature'. He certainly earned widespread respect from police, a group of people with a culture known for being conservative, suspicious and cynical. This respect came from acknowledging Ware's unmatched rigging skills and his commitment to police support work, in spite of his unorthodox entry into the Force.

In addition to the British Empire Medal for his actions at the cliff recovery operation at Avalon in 1950, Ware received two significant formal honours during his police career. The first was the awarding of the Bronze Medal and Certificate of the Royal Shipwreck Relief

and Humane Society of NSW in 1955, in recognition of his actions in apprehending an armed male suffering from a mental dysfunction on a cliff top at Coogee. In 1959 the special sergeant was also appointed as a Serving Brother in the Most Venerable Order of the Hospital of St. John of Jerusalem.

Ware was not above being the subject of jest among those who knew him well: for instance it was a running joke in the squad after he received his St Johns honour that he possessed one of that organisation's highest awards yet he never once held a first aid certificate. In retirement Ware maintained an active life. For many years he and Dolly taught handicrafts to the aged and invalid at the Carlton Scouts Hall. Ware's death at his Kogarah home on Friday 24 April 1970 was felt deeply by all who knew him.

On Wednesday 17 June 1970 Ware's ashes were carried by Dolly and their son on a police launch, and were scattered into the ocean off The Gap. Police Commissioner Norman Allan was also on the launch. Visible to them, standing at attention at the top of The Gap were members of the Police Rescue Squad, other police and bagpipers from the NSW Police Pipes and Drums Band. In tribute to their former leader, Tyson and his men had also erected a Cliff Rescue Machine with Ware's favourite bosun's chair hanging over the cliff's edge, empty.

The Police Rescue Squad and other police on parade at the top of The Gap while Harry Ware's ashes were spread into the ocean.

THE SQUAD GROWS IN SIZE AND CAPACITY THE 1960S

In anticipation of Harry Ware's retirement, Ray Tyson was promoted to sergeant in 1959 and he formally took on the OIC role in December 1962 (he did act in the role when Ware took extended sick leave after his heart attacks). In January 1961 Constable Doug Coasby joined the Rescue Squad on a temporary basis and was permanently transferred in April 1962. In the same year Constable Owen McCaw also joined the team, raising the full-time component to four. A number of part-time keymen continued work with the squad when required, attending emergency calls, filling-in for permanent squad members when they were on leave, or staffing the canteen at major incidents.

As OIC, Tyson evolved Ware's practice of applying a criteria for admission to the unit as a keyman. First and without exception the man had to be a volunteer willing to undergo hours of training for very unpleasant and gory work. Preferably possessing at least two-to-three years of general policing experience, applicants had to be able to meaningfully contribute to the team, that is, have a trade qualification or some life experience that could be shared with colleagues:

> 'We didn't care if they were a motor mechanic, a pastry cook, carpenter, blacksmith, panel beater, [just] a trade of some sort. We found these people could coordinate between their head, their hands and their feet. They were already trained as far as we were concerned, all we had to do was update them.'[106]

This unwritten selection criteria mostly resulted in new members being in their mid-to-late 20s when they became rescue operators, notably older than the average age of police recruits. This greater degree of life experience was put to good use in a diverse array of incidents.

In the middle of violent thunderstorm on the evening of Thursday 30 November 1961 an Ansett-ANA airlines Vickers Viscount turboprop commercial plane with 15 occupants took off from Sydney's Mascot Airport for a flight to Canberra. Seconds after take off the plane was struck by lightning and plummeted into Botany

Bay. Some wreckage quickly washed ashore near the small town of Kurnell at the southern edge of the bay, near Sydney's oil refineries. The Rescue Squad assisted other police and volunteers that evening in foul weather, searching for wreckage and survivors. The following day police and military divers joined in what was now a large body recovery operation in continuing inclement weather (there were severe storms and flooding to the northwest of Sydney at the time). It was a grim business – the plane lay underwater in a mangled heap near the middle of the bay. There were few bodies left intact due to the violent nature of the plane's destruction. Bits of human sinew covered much of the recovered wreckage; clothing and victims were riddled with rivets that had been forced from the fuselage in the tremendous impact when the plane hit the water. The search and recovery operation lasted five days in mostly rough seas. Tyson's team supported detectives, air crash investigators, water police and naval personnel, scouring the bay and foreshore areas (including scrub and bushlands) for remains, aircraft parts and personal belongings. They also assisted in conveying the recovered bodies from launches to waiting coroner's vans. Throughout this period Jack Knight catered for the large police contingent from the canteen van, set up near the suburb of Malabar.

An unusual rescue occurred on Friday 26 October 1962 when a worker at a dredging site next to the Fig Tree Bridge on the Lane Cove River, became trapped in a 12-metre high pile of sand.[107] The man had been walking up the sand to check on a malfunctioning conveyor belt when he fell into a hidden hole, half way up the pile. A workmate and a passing schoolboy immediately rushed to the worker's assistance, he had tremendous difficulties in breathing because of the pressure exerted on his chest from the sand above him. By the time the Police Rescue Squad arrived, over 200 people had flocked to the site in response to a call for assistance broadcast by local police on commercial radio. The frantic digging by the gathering however was actually proving counter-productive – the worker was slipping further under and experiencing more pain. After removing the well-wishers from the area, Tyson and his men used leather straps and manila rope to tie the worker to wooden planks they laid across the cold and partially wet sand, to stop him slipping further under. A tarpaulin was then placed over the sand immediately above him, to minimise the amount of sand falling onto his head. Oxygen was pumped to the man via a hose as police set about

digging him out slowly and methodically. Tyson later told reporters 'If he had been buried again I wouldn't like our chances of getting him out alive.'[108] In total the worker was trapped for two-and-a-half hours before being pulled out and taken to hospital. He quickly recovered and was allowed to go home later that evening.

Ray Tyson putting the tarpaulin into place above the trapped worker. The man was at serious risk of being crushed by the sand, or asphyxiated if totally covered.

A notorious crime in which the Rescue Squad responded to occurred on 12 January 1965 when the bodies of two teenage girls were found on Wanda Beach, to the south of Botany Bay. Both had been brutally (physically and sexually) assaulted. For a number of days the operators, assisted by council workers, searched, sifted (and resifted) over 60 tonnes of sand to find evidence. A very small and bloodied piece of a knife blade was located by Tyson about five

metres from where the bodies were discovered. Forensic tests undertaken at the time were inconclusive, however the find formed an important part of the police's brief of evidence. The case remains unsolved.

About 1:30am on Sunday 31 October 1965 a freight train hit a stopped passenger train at Liverpool Railway Station. The impact forced the rear two carriages of the passenger train to compress into each other. Four people were injured and one other died. Tyson, Fahey and Coasby were called out from their homes, along with Q-Van operators and firemen. At the scene the police took the lead and used winches and oxy-acetylene equipment to cut out panels of one of the carriages, so as to extricate the deceased victim from the mangled mess.

On Sunday 12 December 1965 an 18-year-old scout fell during a rock climbing exercise at Kanangra Walls, near the Jenolan Caves to the west of the Blue Mountains, a 200 kilometre drive from Sydney. Stuck and injured about half way down a 600-metre cliff, the young man remained on the ledge for around 20 hours, supported by some of his friends, before a multi-agency rescue party arrived on the Monday. The party consisted of 75 experienced bushwalkers, rock climbers and four police rescue operators. The scout was placed into a canvas stretcher and carefully raised to the top by a mix of flying foxes, rope hauls and at one stage even being carried on the back of a rescuer. It was an extremely dangerous rescue with thick moss and falling chunks of ironstone proving treacherous to all. The following day a newspaper reported a 2.5-kilogram chunk of ironstone falling and hitting Sergeant Joe Beecroft on his side, causing significant bruising:

'I would have been a goner if it had hit me on the head.'[109]

After many years of lobbying, in 1966 the squad finally acquired their own sets of breathing apparatus. As early as the 1950s Harry Ware had identified the utility of the items for when his men entered confined spaces with foul air or potentially poisonous gases, or when they assisted firemen at fires. Ray Tyson had ensured that two sets were purchased and stored on the first ambulance Q-Van but for several years he was unable to convince the police bureaucracy to purchase the items for his team. Eventually, after a series of search and recovery operations in which he and his team had to borrow the Q-Van's units, the sergeant was able to obtain funding to import two sets of Dräger apparatus from Germany. The most advanced units

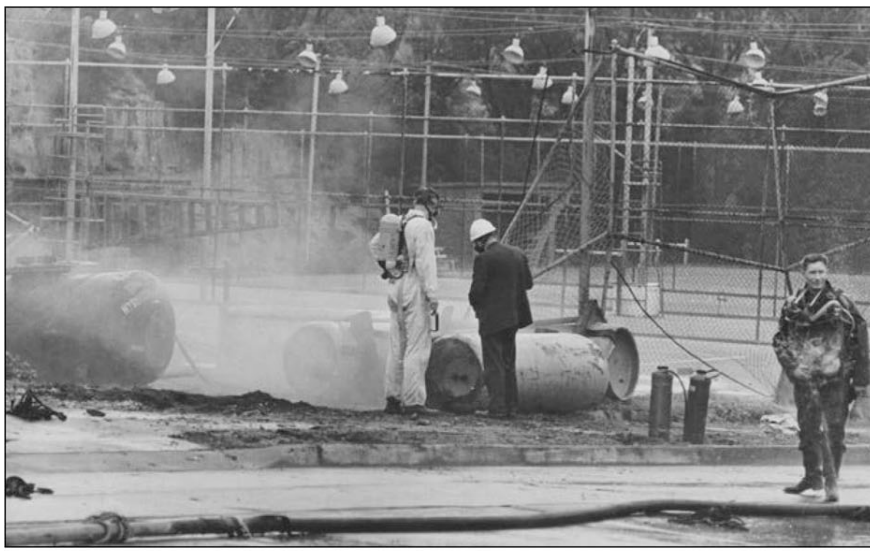
available at the time, each Dräger consisted of a facemask connected via a regulator to two thin cylinders of compressed air, attached to a harness that was strapped to the wearer's back. The usefulness of the Drägers proven beyond doubt at a potentially catastrophic emergency in the southwestern suburb of Bexley.

In the early afternoon of Friday 22 July 1966 a truck carrying various barrels of chemicals hit an electricity pole on the side of a busy road. The pole shattered, electricity wires snapped, and eight barrels were flung to the ground near a tennis court complex – six containing liquid chlorine and two of concentrated hydrochloric acid. One barrel of each chemical was badly damaged and their contents instantly began to spill. Choking yellow chlorine gas fumes and the invisible gas itself quickly spread throughout a significant part of the suburb, overcoming a number of onlookers and making nearby residents ill. The first police on the scene were able to warn others of the danger by radio before being overcome by fumes themselves. Attempts by firemen to use water to douse the chlorine aggravated the pooling hydrochloric acid to form ammonia fumes so intense that they penetrated the breathing apparatus facemasks used by several firemen, requiring them to receive medical treatment. There was a risk of further danger for rescuers as it took time for electricity workers to make safe the damaged and arcing electricity wires. For a time it was feared a major disaster was brewing and a sense of pandemonium spread. Mass evacuations commenced. Sixty-seven children and adults (including police and firemen) were rushed to hospital in a fleet of ambulances and private vehicles.

When first called to the scene Tyson, Fahey and McCaw packed their two sets of breathing apparatus into the rear of their truck before leaving Redfern. Upon arrival the two constables donned the Drägers and checked nearby houses to ensure they had been evacuated. Meanwhile Tyson arranged for extra air cylinders to be delivered to the scene and he called for the Q-Van so as its breathing apparatus could be used. Before the van arrived, a chemist showed up with a number of towels soaked in sodium bi-carbonate. Tyson placed one towel around his mouth and approached the barrels, joined by Fahey and McCaw. With firemen neutralising the chlorine through spreading soda ash on the liquid, the police set about righting the overturned barrel of hydrochloric acid by using the winch on their truck. When the barrel was placed into an upright position, the leaking stopped and a plug was inserted into the hole.

As darkness approached, emergency lighting was erected and activated by police. Tyson and his men were then tasked to coordinate the removal of all the barrels by semi-trailers to a chemical factory at Botany.

The following week Tyson lodged a report with his superiors seeking approval for the purchase of another four sets of breathing apparatus. On the back of what had occurred at Bexley, the request was promptly approved. The extra sets were used frequently. They came in handy for instance at a violent domestic siege at the western Sydney suburb of Revesby on Saturday 27 July 1968. In the front lawn of his father's house a young man shot dead his mother-in-law and then barricaded himself inside the building, holding his 17-year-old wife and their seven-month-old daughter hostage. Refusing the pleas of his father to surrender, the man threatened to shoot anyone in sight. As darkness approached the Rescue Squad set up emergency lighting at various locations surrounding the house. The following morning the offender fired a large number of shots at police and media vehicles, hitting one over 400 metres away. A neighbouring house was also peppered with bullets. With heavily armed police from the Force's Emergency Squad escorting them, Fahey, Coasby and (part-time member) Joe Beecroft erected four large and heavy metal shields within easy view of the house. The shields gave ballistic protection to Emergency Squad snipers positioned to assault the premises if required.



The Bexley emergency. Sixty-seven people were taken to hospital and hundreds were evacuated as potentially lethal gases spread throughout the suburb. Top: Bill Fahey working with a fireman to plug a hole in the container of hydrochloric acid. Below: Owen McCaw wearing a Q-Van breathing apparatus examining the chlorine barrels, just prior to the items being removed from the scene.

Shortly after midday a command decision was made that the Emergency Squad would shoot tear gas into the house. Concerned about the safety of the wife and particularly the child, Tyson ordered Fahey and Coasby to don breathing apparatus in case they had to rush into the gas to effect a rescue. This scenario indeed happened. In

a thick haze of gas the wife staggered from the building choking, distressed and clutching her daughter. Fahey dashed from cover to grab the child and lead the mother to safety. Bundled into an awaiting ambulance, both mother and child were rushed to hospital. Fahey had placed himself directly into harm's way, and for a time he was only a few metres from the room where the offender had earlier shot at police. After being arrested and charged, the labourer was convicted of murder.

Earlier that month the squad had been involved in what was arguably the most preposterous siege in Australian history. On 2 July 1968 police arrived at a fibro cottage in the (then) rural western suburb of Glenfield to question the male occupant about stolen car parts seen in his garage. The man, Wally Mellish, was a convicted petty thief who had recently served time in prison. He produced a silenced revolver and shot at police (he also had possession of a shotgun and a .303 rifle). Mellish told police he had two hostages, a woman (his girlfriend of just a few days) and her infant child. He made it amply clear numerous times that any attempt by police to storm the house would result in the woman and child being shot.

This resulting siege lasted for just over a week (174 hours) during which time, in a highly unorthodox move, Commissioner Norman Allan took personal charge of police negotiations. In an absurd series of events for which he was strongly criticised, the state's top cop agreed to arrange for Mellish to marry his girlfriend inside the cottage – with Allan himself performing the role of best man. The following day, after allowing himself to be held hostage for over an hour, the commissioner also ordered police to hand over to Mellish an Armalite assault rife and 200 rounds of ammunition. The petty criminal had said he wanted to have the same level of high-powered weaponry as police. Eventually, and after several false promises to surrender, the gunman finally gave himself up only when Allan guaranteed that no charges would be laid in regards to the siege, and that he would help him to enlist into the army (so he could fight in Vietnam). The commissioner honoured his promise and personally escorted Mellish to an army base, where he was promptly rejected for military service.[110] He was then taken to a psychiatric institution. During this tragicomedy of events, the Rescue Squad provided lighting, and canteen services not just to police, but also to Mellish and his hostages. They even arranged the couple's wedding breakfast.

As the decade progressed the overall workload of Tyson's team

dramatically increased. Whereas they had been called to 35 emergency incidents in 1960,[111] in 1964 the number was 190 (110 of which occurred outside of rostered hours),[112] and in 1968 the number was 205.[113] In addition to the ever-increasing number of operational (including catering) incidents, the team of four full-time members delivered multiple three-day civil defence courses to police in both Sydney and at various regional locations throughout the state (the number of courses delivered peaked at 30 in 1967).[114] They also gave basic training to police cadets who spent part of their learning rotating through the various specialist squads in the Force.

Under Ray Tyson's watchful eye, Bill Fahey instructs police cadets in basic bows and hitches. In the background of the above photo can be seen the squad's F100, the canteen truck and a trailer.

Each year the squad trained multiple classes of ambulance officers and independent rescue units from country areas, gave scores of presentations and lectures to a host of public and community oriented groups such as scouts, church groups and charity bodies. They also delivered cliff rescue training on a periodic basis to

selected staff at the Snowy Mountains Hydroelectric Authority in southern NSW. The Rescue Squad earned the nickname within the Force of 'McHale's Navy', a reference to a popular television show at the time, because of their informality with each other (almost every rescue operator was known by a nickname) and a perception they were laid back, unaccountable and performed little work.[115] In reality their workload was unrelenting. It was noted by Tyson in a 1969 report that the four full-time rescue operators had worked between them 1181 hours of overtime in 1967, and 3044 hours in 1968. Three part-time members who assisted the team for sustained periods in 1968 had also worked 1047 hours of overtime between them.[116] Much of this overtime was, and remained, unpaid.

In 1969 both Constables McCaw and Coasby left the Rescue Squad. Coasby applied for transfer to general duties partly to enhance his general policing skills and seek promotion, but mainly because he wanted to spend more time with his family. McCaw resigned from the Force to pursue other interests. Both operators were highly valued for their efforts and skills. Not coincidentally, for some time Tyson had been lobbying for an increase in staff, in recognition of the high workload and the stresses on him and his men. He wanted to double the full-time component to eight – he now urgently had to focus on keeping the numbers he had. The two replacements were men with unique backgrounds.

Sergeant Second Class Joseph 'Joe' Beecroft replaced Coasby. Beecroft, a former farmer, milkman and roustabout, had been a part-time member of the squad since 1947. Stationed for most of his service at Malabar and working with that area's Aboriginal community, Beecroft had a reputation for calmness, sincerity, patience and good negotiation skills. Immediately prior to joining the Force Beecroft had served as a naval policeman in World War II, although he spent most of his service as a prisoner of war.[117] Badly wounded when Japanese soldiers tortured him by deliberately cutting the sinews in his left elbow,[118] Beecroft hid the magnitude of the injury from physicians when he applied to join the Force. In late 1968 the sergeant was temporarily attached to the Rescue Squad to assist during terrible bushfires to Sydney's south and west. Tyson was able to take advantage of Beecroft's physical presence at Redfern when Coasby requested a transfer, to successfully lobby for the sergeant's permanent transfer. This would prove fortunate because of Beecroft's natural leadership skills and his subsequent prominent role

in the leadership team.

McCaw's replacement was Probationary Constable John Nagle, a former public servant, Commonwealth policeman and a part-time commando in the Citizens Military Force. As a commando, Nagle had qualifications and experience in tactical roping, instructing, parachuting and map reading. He was able to bring his knowledge of roping and bush crafts to the police team, and help it to evolve.

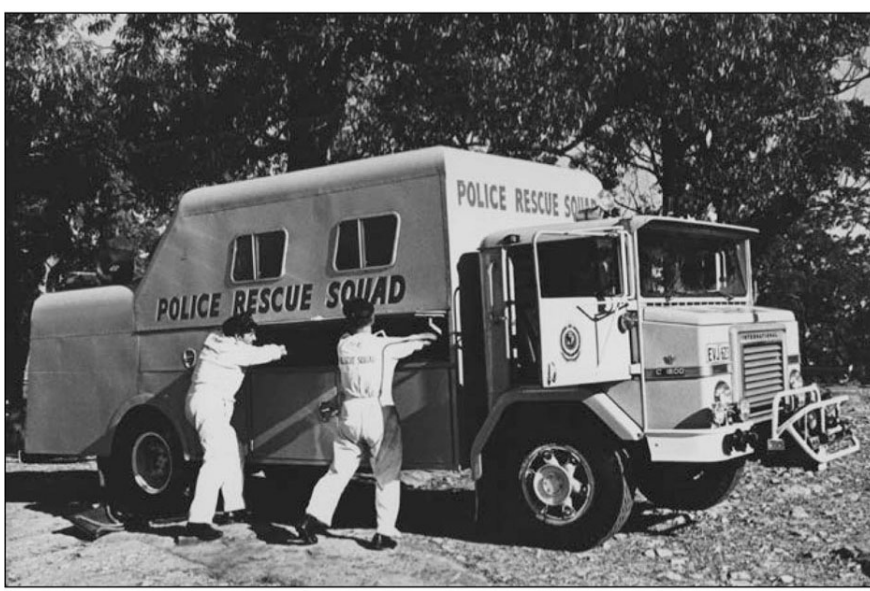
In addition to new staff, the late 1960s saw some significant developments in regards to equipment acquisition. New items included more powerful hydraulic and cutting equipment, encapsulated gas suits, an aluminium dinghy, the introduction of small amounts of nylon ropes as well as new types of climbing equipment. The kit was identified either through research undertaken by rescue operators, assessment of equipment used by other organisations, or after an item had been loaned from distributors during an operational incident and found to be useful. Such an instance occurred at the search for the body of a murder victim during the Christmas period in 1969. On Boxing Day police began searching an industrial building site on the shores of Botany Bay as a result of a tip-off from a prisoner. Working with detectives and metal detector-equipped soldiers, rescue operators spent almost three days digging underneath parts of the building site. Success came only after Tyson and his men had borrowed a post-hole digger from a distributor and explored multiple locations near the building. Impressed by the power and effectiveness of the digger, Tyson obtained approval to purchase one, but only after he convinced the distributor to invoice components separately. Had the item been billed as one price, the Force would have baulked at the cost.

A body recovery operation from a cliff near Brooklyn, to the north of Sydney, on 7 March 1970. Pictured from left to right are: ambulance rescue operator Lew Stevens, and police operators Peter Robb, John Nagle and Dick Lamb.

After many years of persistent requests by Tyson and a growing recognition by police command that specialist vehicles such as the ambulance Q-Vans were indeed useful to the conduct of rescues, in the mid-to-late 1960s the squad was able to obtain contemporary (even new) vehicles. Initially, a second-hand green coloured Leyland Land Rover was issued, followed by a second one. These were joined in 1969 by the first of two new long-wheel base Toyota Land

Cruisers, the first one donated by the company that had the licence to import the vehicles into Australia. Accepting a donated Toyota was notable for it was contrary to then departmental policy to only use vehicles manufactured in Australia, the United States of America or the United Kingdom. Painted 'crystal white' with a 'golden yellow' roof (the then international colours for rescue vehicles) the Land Cruisers (with modified enclosed rear trays) proved extremely useful in rough terrain and were more robust than the F100 truck, even though they held less equipment.

A landmark addition to the squad's capacity and capability occurred on Monday 23 June 1969 when the keys of the largest dedicated emergency rescue truck then in use anywhere in Australia, were formally handed over to Commissioner Allan. The nine tonne International C1800 manual transmission truck was a unique tool shed on wheels. The so-called Rescue 1 (radio call sign '33-1') was distinctive (even formidable) in appearance and represented a generational leap in design and capacity. No other rescue service in Australia at that time possessed a similar type of heavy rescue vehicle, although many soon followed suit.



Bill Fahey and an unknown member of the squad stowing equipment into Rescue 1, just after it was commissioned into police service.

On the rear of a standard cab/chassis configuration was a bespoke

metal superstructure designed by Tyson and Fahey, based on a configuration used by emergency services in the USA. The rear contained numerous storage compartments for three tonnes of rescue equipment such as hydraulics, stretchers, ropes, breathing apparatus, air cylinders and gas suits, along with a wide variety of general and specialised tools. The distinctive hunchback shape to the truck's rear was a compromise in design. Two 1000 watt tungsten tube floodlights were attached at the back of the roof, each connected to one of two stored generators. To avoid the risk of the lights sitting above the roofline and being knocked off when driving under bridges, the roof was tapered into its hunchback shape.

A key feature to the vehicle was a walk-in command post/cabin, situated immediately behind the driver's cabin. Access was gained from the rear of the truck by walking over aluminium compartments that housed the posts of the Cliff Rescue Machine. Inside the cabin were two small tables and two benches, the latter could be converted into bunks to enable patients to be placed and treated if there was no ambulance in attendance. Alternatively rescue operators could use the bunks if they had to camp overnight at a remote location. Numerous cabinets and shelves were installed to hold radios, maps and stores. For several years a small lockable medical cabinet was also in the cabin. The cabinet contained a range of drugs (including pethidine) and plasma, available to be used if required by medical practitioners.[119]

Initially painted ship-grey, Rescue 1's livery was soon changed to white and yellow, with the squad's name on all sides in large blue lettering. Carrying the latest sirens, horns and emergency lights of the era, the vehicle became the centrepiece in a growing number of Police Rescue Squad vehicles being; (at the turn of the decade) two Land Cruisers, the Austin catering van, a Holden utility, two box trailers (one carrying lighting equipment and the other carrying a large generator and fuel), two Wiles cooking trailers and a water-tanker trailer.

Of interest, just prior to Rescue 1's commissioning the *Motor Traffic Act* was amended to allow sirens and blue revolving emergency lights to be affixed to all police vehicles. Prior to then, the Act had restricted the definition of a police vehicle to only those driven for urgent police business. This meant that the Bedford, F100 and the carpenter's utility had been prohibited from having emergency lights and sirens. For many years the words 'Police

Rescue' painted on Masonite boards were the only markings the trucks could have, and they were mounted on the front and rear of the canvas cover to the rear tray. Humorously though, it had not been unknown for Harry Ware to lean out the side of the truck and use a loud hailer to mimic a siren, to get cars to move out of the vehicle's way when they rushed to a rescue!

The F100 shortly before retirement, at the Redfern Depot. By this stage a police sign had been affixed to the roof of the drivers cabin in addition to the masonite sign on the canvas cover. The original Police Rescue masonite sign had by this time disintegrated. In the background is the Austin canteen truck.

FLOOD RESCUES

As early as the 1950s the Rescue Squad had acquired two small (10 foot) plywood boats to conduct body recoveries from dams and inland waterways. Considered essential for squad operations, the boats were light enough to be raised and lowered on the Cliff Rescue Machine if needed, but large enough to (just) fit four burley policemen. The Rescue Squad was occasionally called to use the boats to assist police in localised flooding events in-and-around Sydney (the earliest incident occurring at Fairfield on 10 February 1956) but it was not until 1970 that approval to purchase an outboard motor was given. With only oars to provide motion, and with no formalised training in flood rescue work, the Rescue Squad could only be deployed after flood situations had settled and water flows had stagnated. By the 1960s however, another police unit had established its credentials in the specialised area of flood rescue operations.

In 1953 the Civil Defence Organisation gave Sydney's Water Police two wooden four-metre flood boats. In times of inland flooding the shallow hulled vessels enabled police to conduct patrols in flood waters, rescue and evacuate people, check the welfare of stranded people wanting to remain in their properties, move stock, and supply provisions as required. Initial practice was for two policemen per boat to deploy, wherever possible, alongside army units operating DUKW amphibious trucks.[120] Once the police and army units rendezvoused near floodwaters, the DUKWs (commonly referred to as 'ducks') would be used to carry the police and their boats to the worst affected areas, where they would then undertake flood work operations.

In late February 1955 a devastating flood occurred in the Maitland region near Newcastle. Enough rain to fill Sydney Harbour four times over fell, in places floodwaters reached heights of just over 15 metres and travelled at speeds in excess of 30 kilometres per hour. Thousands of tonnes of soil and debris were washed away, over 55 houses were destroyed and hundreds more damaged. The death toll exceeded 16, over 15,000 people were rescued and evacuated by hundreds of civilian and military personnel. This included four water police operating two flood boats, teamed with eight soldiers operating two DUKWs. Together, the 12 men were involved in the

rescue of an estimated 1600 people and the evacuation of another 6000.[121]

Tragedy struck the group on their way to Louth Park, south of Maitland, on Saturday 26 February. Near the main railway bridge a DUKW fouled high-tension power lines. When the vehicle's antenna touched the lines, the massive jolt of electricity created what witnesses described as a blinding flash of blue flame. Two soldiers on the DUKW instantly died and a constable was propelled into the flood waters (requiring immediate rescue by an RAAF padre who had also been a passenger on the vehicle). A second constable in the DUKW, Bernard Orrock from Sydney Water Police, was holding a rope connected to the flood boat when the electricity struck him. Severely electrocuted, the constable was rushed to Maitland Hospital where he later died while in an iron lung.[122] Orrock had been personally involved in the rescue of 70 people during the floods prior to his death. He was posthumously awarded the Queen's Police Medal for Gallantry and the Bronze Medal of the Royal Shipwreck Relief and Humane Society.[123]

The experiences from the Maitland floods forced a widespread rethink of disaster management and rescue operations in the state. Despite the valiant efforts of many, there had been little coordination in the preparations for and the response to the floods. On 3 May 1955 Cabinet authorised the formation of the State Emergency Services Organisation,[124] to 'plan and control arrangements to cope with disasters such as floods and bushfires'.[125]

Sydney Water Police subsequently acquired extra flood boats capable of operating in swift flowing waters (three of the boats were named after Orrock and the two soldiers killed with him). By the end of 1958 there were six boats and a total of 18 police trained in flood boat and DUKW operations.[126] Four flood boats were stored at the Sydney Water Police base on Sydney Harbour, and one boat each at the Windsor and Richmond Police Stations (to Sydney's northwest). The boats were crewed as required by the trained officers.

Massive and sustained flooding of the Georges, Nepean and Hawkesbury Rivers for over a week in November 1961 cut off of all main roads out of Sydney's south and west. Around 3,000 people were evacuated from their homes, mostly by police and military personnel using flood boats and DUKWs. The scale of the disaster was significant and stretched police resources to the limit – for in addition to the floods, foul weather caused havoc on Sydney Harbour and

other nearby bays, all requiring a police response. In the aftermath of this event the Force created the Flood Rescue Squad, a subset of the Water Police. The new team had one policeman allocated to it on a full-time basis to coordinate training and maintain the unit's boats, vehicle and trailers.[127] The rest of the unit comprised of police who volunteered for service from various stations throughout the Sydney area. After a five- day course in seamanship, new members undertook a 12-month probationary period during which time they attended compulsory training sessions every three months.

The squad's first operation came in July 1962 when the Richmond River flooded. That operation and other successes led over time to expansion. By 1972 the unit had 36 members[128] who operated a substantial number of modern aluminium flood boats. Because of the vagaries of the weather, in some years the Flood Rescue Squad would not be called out while in others, they would spend weeks in the field in locations throughout the state, providing rescue and support services to local communities. One-time member Garry Smith recalled the short-notice nature of callouts:

> 'Usually in the middle of the night a phone call [came for you] to be at the base in an hour's time or something [similar] ... and you would usually be transported around ... in either a truck and take the boats on a trailer, or you would go with the Air Force in a Caribou or Hercules [aircraft] ... and they would drop you where the flood was.'[129]

The Police Rescue Squad and the Flood Rescue Squad seldom worked alongside each other in operational situations. The majority of flood work was in rural areas away from where the Rescue Squad tended to deploy. Further, Force policy dictated that police officers could only be members of one specialist team at any one time, so there were not many police who joined both teams during their careers. The two notable exceptions were Swanny Ivaarson and Garry Smith, both of whom transferred from flood operations to the Rescue Squad in the second half of the 1970s. These two would also lead Police Rescue Squad – Smith for almost a decade.

The Blue Mountains Police Search and Rescue Group

The vast Blue Mountains region of the Great Dividing Range to the west of Sydney consists of some of the most beautiful but inhospitable bush terrain in NSW, dotted with townships and walking tracks. The need for a search and rescue service in the region had been well recognised by the mid-20th Century, particularly with a steady growth in weekend and holiday tourist activities of Sydney-siders and interstate visitors. For many years though, various efforts to raise such a rescue unit by individual police officers, ambulance officers, councillors and/ or concerned members of the public, came to naught. The result was an ad-hoc approach that could have comical results:

> 'There was very little organisation or preparation. Searches were then organised by police but were usually led by local experienced residents, assisted by bush walking organisations. This was found to be inefficient and on a number of occasions search parties had to be despatched to look for the original searchers.'[130]

The Cliff Rescue Squad had been no strangers to the region. Harry Ware had conducted NES training for local police during the World War II and the Rescue Squad continued to visit post-war either to train or carry out body recovery or rescue operations that were beyond the capability of local authorities. So likely was the chance of cliff rescues occurring in the area that towards the end of World War II, when Ware first had metal versions of the Cliff Rescue Machine built, three sets were stored in the Blue Mountains.[131] The frame of one machine was left for a time erected atop of bush cliff adjacent to Wentworth Falls (with the ropes locked in a nearby box), the second set was placed in the house of a policeman who lived in the Wentworth Falls township and the third was left stored on a pegged wall inside Katoomba Police Station.

Harry Ware (front right in both) with Blue Mountains police. The photos appear to have been taken during World II and Ware could have either been delivering training in his NES or Cliff Rescue Squad capacity (likely both).

Notable rescues and recoveries conducted by the Rescue Squad in the Blue Mountains included the body recovery operation Govett's Leap in November 1947 (see pages 33 – 34) and an incident that started in the late afternoon of Sunday 28 December 1953. A 17-year-old boy looking for a good position to take a photograph began climbing up the side of the third of the 'Three Sisters' rock formation near Katoomba. After spending some time looking for the perfect spot, he realised he was trapped on a ledge and couldn't get down. A

tourist using a pair of binoculars from a semi-distant lookout noticed the youth frantically waving his white shirt. Given it was just before 5:30pm there was not enough time to reach him before nightfall. Police set up a speaker system and told the youth not to panic and that the Cliff Rescue Squad was on the way. Arriving near midnight, Ware set off with a rescue party of just over a dozen men. The group were first lowered to the valley floor by a nearby tourist train;[132] they then bushwalked carrying handheld torches in a heavy fog that is not uncommon for that time of the year. Several times they ascended the mountain, only to withdraw when faced with unpassable boulders or sheer cliffs. Their shouts to the boy went unanswered, hearing only 'useless echoes and the dripping of moisture from sodden trees ...'.[133]

By dawn the rescuers discovered they were 20 metres below the youth but they could go no further, themselves perched on a precariously thin ledge 100 metres above the valley floor. It took two hours of patient negotiations for Ware and his party to talk the weakened and frightened boy down the rock cliff to their location. When he successfully reached the group, the youth (with his camera) was taken via the tourist train to be reunited with his parents.

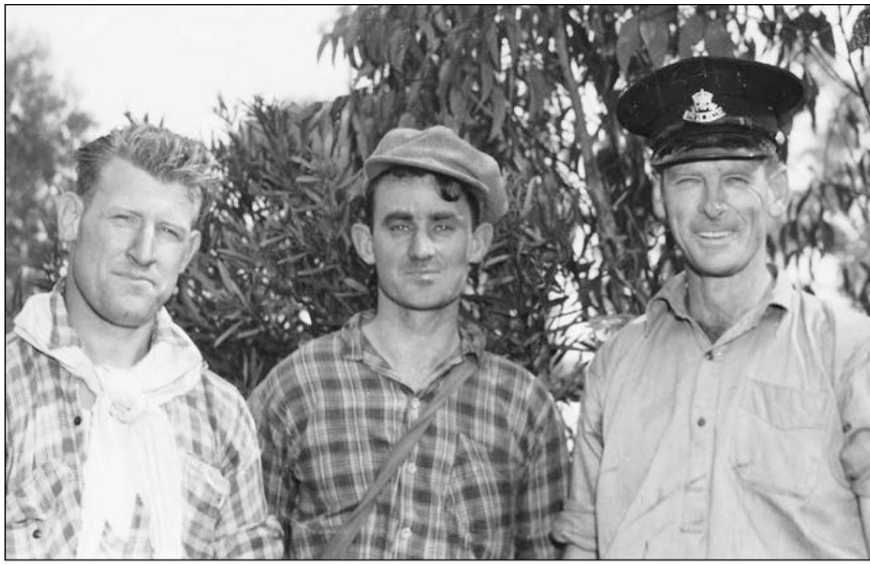
The boy (front, centre) walking back to his parents, along with Harry Ware (front, right) and the rescue party.

The number of tourists visiting the Blue Mountains considerably increased in the 1960s as better roads and higher car ownership rates

made travel easier. This was accompanied by a rise in the numbers of motor vehicle crashes and missing or lost bushwalkers (jokingly referred to at the time as 'Pitt Street bushmen').[134] One widely reported rescue occurred in early January 1963 when over 400 searchers united to look for two sea scouts who went missing while bushwalking in the Grose Valley. The searchers were a mix of local police, the Rescue Squad, ambulancemen, scouts, members of the Bushwalkers Federation Search and Rescue Section and concerned members of the public. After five days the scouts were discovered alive, trapped on a ledge at Arathusa Gorge. The two had scraped the large letters 'S.O.S.' into the cliff face.[135] Using a large hauling party of searchers, Ray Tyson was lowered on a single rope to they boys; all were hauled up the cliff.

As time passed, the ever-increasing workload of the Police Rescue Squad meant that it often was unavailable to respond to calls in the mountains or if it did, their response time was a minimum of two-to-three hours. This sometimes could be the difference between life and death, particularly if a bushwalker had been injured during a cold winter's day or if a motorist was badly trapped in a crashed car. This frustrated local police, especially Sergeant Second Class Arthur 'Ernie' Sanderson who had worked in the Blue Mountains since 1947. A keen bush enthusiast, Sanderson was at the core of a group of locals who used makeshift ropes, basic tools and old canvas stretchers to rescue people or recover bodies in the cases where the Rescue Squad could not attend.

The refusal by the Force's command to entertain the idea of forming a local search and rescue squad frustrated Sanderson and his extensive network of contacts; eventually they found a like- minded soul in the form of the local Member of Parliament and Mayor of Lithgow, Harold Coates. The politician was a passionate advocate for the local region and used his independent status in parliament wisely. He embarked on sustained lobbying of key officials, especially Commissioner Allan. Coates' persistence eventually paid off for in late 1967 the commissioner authorised action.



Policemen John Bourke, Tim Tyler and Ernie Sanderson about to set off with other police and a doctor to rescue a badly injured scout in the Grose Valley in October 1957. Sanderson would later be the inaugural OIC for the Blue Mountains Police Search and Rescue Group.

At Katoomba Police Station on Wednesday 31 January 1968 a meeting was held between a number of police, including local commanders and staff, along with both Tyson and Sanderson. With the (somewhat reluctant) imprimatur of their commissioner, the meeting agreed to form what became known as the Blue Mountains Police Search and Rescue Group. The team of two sergeants and eight constables were all to do their rescue duties on a part-time basis. Five of the group were volunteered for service by the virtue of being posted to the one-man stations at Blackheath, Lawson, Mount Victoria, Rockley and Wentworth Falls. The remaining members were genuine volunteers, from the larger stations of Katoomba, Lithgow, Oberon and Springwood.

The new team's function was set as:

> '... to search for lost persons, and to carry out rescues other than those of a serious and complicated nature, and in the latter case to assist the Police Rescue Squad from Sydney.'[136]

From the outset, Sanderson and his team knew that a critical key to success was the participation of a handful of non-police local residents with specialist skills and knowledge. These men included ambulance officers, National Parks and Wildlife Service (NPWS)

employee Kevin Browne, and bush fireman Jack Tolhurst. The latter two in particular possessed an intimate knowledge of the local terrain including the dirt road and fire trail network that crisscrossed the many valleys and ridgelines. As Ken Holmes, an inaugural member of the group who was at the time stationed at Blackheath, recalled about these non-police members:

'You couldn't do it [rescue operations] without them.'[137]

A search of official records in Sydney suggests that much of the new group's equipment was not officially delivered until mid-1969, local records however show that they were in action from early 1968. When kit was eventually delivered, it consisted of a limited assortment of ropes and associated climbing equipment (including boots), compasses and maps, and eventually a set of Enerpac hydraulic rescue equipment. This all was initially carried in an unmarked, cream coloured long wheel-based Land Cruiser based at Katoomba Police Station.

At first, personal issue items for each member of the group were limited to just two pairs of unmarked white overalls. For the first year, training was undertaken on a fortnightly basis with instruction provided by Tyson's team (mostly Fahey). Training priorities were in search and rescue, bushcraft, cliff and then road rescue techniques.[138] The frequency of training then settled to one day a month and for a long time was conducted by Sanderson, sometimes with assistance from Fahey and his Redfern colleagues. Such a training day was conducted at the township of Wentworth Falls on Thursday 1 July 1971. As the session started, Fahey and the Blue Mountains members were urgently called to the nearby Sunset Rock, behind the Queen Victoria Hospital. There a patient was sitting on the cliff's ledge, threatening to jump. Using his tried and true technique, Fahey began to sneak up behind the male with the intention of grabbing him with a bear hug. The policeman had a rope tied to his waist, the other end of the rope was held by rescue operators in case Fahey looked like he might fall over the edge. At the same time other police attempted to distract the male, but the plan turned sour when he glanced behind him and saw Fahey about to pounce. With no choice, Fahey rushed the man and the two almost fell over the side but were pulled back to safety.

Earlier that year, on Saturday 20 and Sunday 21 February 1971, the Blue Mountains and Redfern teams conducted what was described

at the time as the most hazardous and difficult descent yet made by police rescue operators in the Blue Mountains area.[139] In the afternoon and early evening of 19 February a teacher and four college students commenced a night climb down an imposing cliff face known as the Gordon-Smith Chimney, at Mount Banks. In the darkness a 16-year-old boy slipped off a mud-covered ledge and fell down 10 metres onto rocks and broke both his legs. The teacher also fell and badly injured his back. Two of the remaining three students had the presence of mind to ascend the sheer cliff face and in darkness, hitch a ride to the Lithgow Police Station to alert police. Ernie Sanderson and his team, along with a doctor, ambulancemen, civil defence rescuers and a group of rover scouts, responded to the call for assistance. Tyson and several of his team also arrived just as the first group began to descend the extremely slippery tracks that were covered in moss and mud, and navigate rock falls caused by recent violent storms. In total, 12 rescue operators led by Sanderson and Tyson, eventually reached the teacher and student. Tragically, the boy had already died.

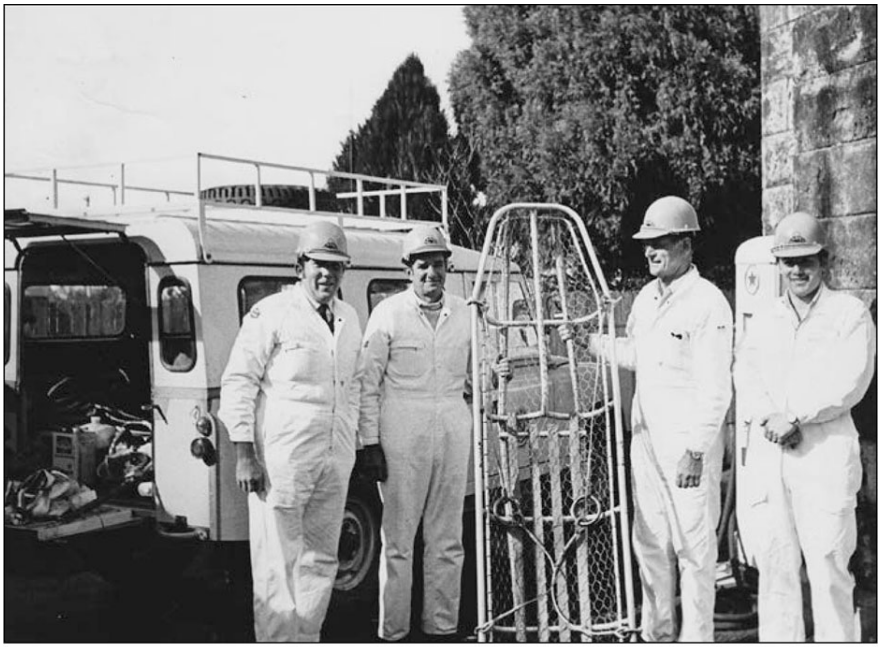
Police command was able to secure the support of an RAAF helicopter. As the helicopter was being flown from Canberra, the teacher was stabilised, placed into a stretcher and then lowered to the valley floor. The body of the dead boy was also lowered in a stretcher. This involved delicately manoeuvring the stretchers by rope down a 50-metre cliff face and waterfall. Once at the bottom, the rescuers carried both victims through the dense bush to a small escarpment. There, both victims were winched up to the hovering helicopter and then flown to Katoomba Hospital, arriving just prior to dusk. For the rescuers, they had to make their own way out of the valley.

The group split into two. The first (led by Sanderson) retraced their route up the cliff so as they could collect the rescue equipment left behind. The others (led by Tyson) set out across the valley floor to a walking track at the other side. To reach the track the men pushed through dense bushland and forded the swollen Grose River (with water at neck level) before walking / climbing through the bush and craggy cliffs on the other side of the valley. There they had to ascend the almost vertical 650 metre high walking track at Perry's Lookdown. All this was done during darkness, with both groups reaching the top just before midnight. For most if not all the group, especially an elderly Tyson, it was physically the most exhausting

rescue they ever attended. Tyson is recorded as having told Sanderson that he would never come back to ‘these’ mountains again.[140]

An added complexity for the operation was diverting a number of police to a second rescue call, approximately 25 kilometres away at the Narrow Neck Peninsula near Katoomba. Two young rock climbers had been injured and required carrying-out. The members of the Blue Mountains Rescue Group not directly involved in the Gordon-Smith Chimney rescue responded to the call. At the scene they were helped by other police and bushwalkers to carry the victims several kilometres through the bush to waiting ambulances.

Incidents such as these demonstrated the abilities of police rescue operators, and their capacity to respond to multiple concurrent incidents. From 1971 to 1975 alone, the Blue Mountains Group rescued 120 people, 16 in one incident where a bus rolled down an embankment near the township of Blackheath on a rainy October afternoon in 1973. The type of work undertaken by the part-time police team in the Blue Mountains was almost as diverse as the team at Redfern, though not as frequent. From a departmental point of view, the arrangement in the mountains was so proficient that it was used as the template in the coming period of expansion.[141]



Blue Mountains rescue operators in the mid-1970s standing next to the unit's vehicle at Katoomba Police Station. Bob Blakemore (left) next to Col Clarke, Ernie Sanderson (holding a Stokes litter) and unknown.

THE EARLY 1970S TO CYCLONE TRACY

The 1970s proved to be a dynamic and defining decade for the Police Rescue Squad. The 1950s had been characterised as the tentative development of a general rescue and police support team. The 1960s was a period of consolidation of capability (equipment and skills) matched with a small growth in capacity (people). The 1970s though would see a massive increase in operational tempo, matched by a rise in both capacity and capability for the Redfern and Blue Mountains teams, and the establishment of a number of other part-time police rescue units in Sydney and regional NSW. The decade would prove to be when Police Rescue firmed its prominent role at the centre of the NSW rescue community, and in which police rescue operators unambiguously set the standards of service that became the benchmark for other agencies to emulate. Yet few at the beginning of the decade would have confidently predicted the full scope of the challenges and opportunities that were to come.

After years of persistent lobbying, Ray Tyson's ongoing struggles to increase the size of his team slowly bore fruit. By October 1972 the team stood at eight full-time members (up from four in 1969); Sergeants Tyson and Beecroft, Senior Constable Fahey, Constable First Class Ron Wells, and Constables John Nagle, Allen Irwin, Arthur Ackroyd, Richard 'Dick' Lamb and Denis Hall (the canteen supervisor). Staff rotations, promotions and resignations saw a small turnover in staff, others filled-in on a temporary basis to cover staff on leave. Some who joined in this period, such as Nagle, Ackroyd (a former navigator in the navy), and later Bruce Gane and Gary Raymond (both ex-ambulance officers), had actively sought to join the team by approaching Tyson, Beecroft or Fahey. Others had been approached because of their talents. Lamb was one of the latter; he had joined the Force in 1968 after being a fitter and machinist at a major security company that specialised in safes. Beecroft knew Lamb and his trade background, and suggested the probationary policeman try a period of rescue duties. Although he was scheduled to transfer to Water Police, Lamb agreed and was posted to Redfern for two weeks in January 1970. Tyson was so impressed with his talents that he refused to let the constable go. Months later, in June 1970, the Rescue Squad won what had become a protracted argument with

Water Police to keep Lamb.

Bill Fahey and other police lowering Dick Lamb down one of Sydney's cliffs in February 1970. This was one of Lamb's first cliff calls and, as was the practice in that era, he had not received any formalised rescue training prior to joining the Rescue Squad. Instead, drawing on his trade skills, Lamb learned on-the-job from Fahey and the other experienced operators.

The doubling of the squad was accompanied by a marked change in dynamic for cliff rescue operations. The days of having scores of police (general duties and 21 Division) trained in the use of the Cliff Rescue Machine had passed. The Rescue Squad was now considered

to be sufficiently staffed to either handle a cliff incident on their own, or could form ad-hoc hauling parties from onlookers or the general duties police that arrived at each incident. The introduction of more reliable nylon ropes and climbing equipment also gave the rescue operators more options when conducting cliff operations, leading to a slight reduction in the usage of the Cliff Rescue Machine.

To be sure, the extra pairs of hands now attached to the team on a full-time basis were much needed because of the marked increase in rescue and police support work. From attending 205 calls in 1968, rescue operators at Redfern attended 488 in 1972[142] and a total of 3,663 between 1971 and 1976.[143] The sheer variety of emergency calls were ever expanding; in addition to cliff and road rescues, and catering operations, rescue operators routinely rescued trapped animals, carried out bomb searches, supported crowd control operations and arrested offenders (they were after all still police). Requests to undertake storm and tempest recovery calls – erecting tarpaulins over roofs smashed by violent storms – became so frequent that their services were restricted to damaged government buildings only.

The following provide glimpses of the diversity of work during this era. On Monday 24 January 1972 rescue operators worked for over an hour with a mechanic and ambulance officers to release a two-year-old boy from a washing machine at the family home in Bondi. The youth had tried to get into the machine's tub but his leg became jammed. On Wednesday 20 June 1973 the team responded to an emergency call in a Sydney building where a former member of parliament had been crushed to death. The man had been caught in between the safety cage and the door of an elevator, and then was crushed as the elevator tried to rise to the next floor. In addition to freeing the body, the police had to rescue the man's brother, a teenage girl and the elevator attendant, all of whom were stuck in the elevator and traumatised by the ordeal. On Monday 18 February 1974 a truck carrying a large amount of poisonous phosphate chemicals hit a light pole and spilt its load across a major road at Botany. Police donned breathing apparatus and heavy gloves (as the phosphate was lethal to touch with bare skin) to clean the site.

Earlier, on Thursday 20 April 1972 rescue operators joined a major police search for possible snipers near a rifle range at the eastern seaside suburb of Malabar. The general duties police dispatched to a report of shots fired near fishermen soon found

themselves ducking rounds. Heavily armed tactical police and Rescue Squad members began searching the range and its surrounding area. A class of school army cadets were soon located undergoing rifle training. A short (and presumably terse) conversation was had between detectives, the cadets and teaching staff, about the need for disciplined marksmanship. The search was called off.

The Rescue Squad on parade for a dignitary in 1971. Rescue police are (from left to right) Ray Tyson, Bill Fahey, Ron Wells, Arthur Ackroyd and Dick Lamb (shaking hands).

Calls to attend industrial accidents were also commonplace. On Tuesday 29 June 1971 the squad raced to Bluefish Point, North Head, to a report of men trapped in a rock fall. The site was where the Water Board was constructing underground sewage outflows into the ocean. Three workers had been almost 100 metres underground in the main shaft, standing on a platform and rigging explosives. With no notice, around two tonnes of rock fell from above, smashing into

the machinery and workers. One man managed to stagger for help after being unable to help his workmates, both of whom were pinned down and feared dead. Led by Beecroft and Fahey, a party of five police rescue operators, Water Board workers (including the two sons of one of the trapped men), and medical staff from Manly Hospital, went underground. There they found the bodies of the men, still pinned under rocks and debris. It was a fraught recovery operation as the explosives and detonators were strewn among the fallen rocks. There was added danger of explosion when police had to use an oxy-acetylene torch to cut a cable that had become enmeshed with one of the deceased. During this, another rock fall occurred, smaller than the earlier collapse yet a large chunk of rock hit Fahey on his head. Fortunately the policeman wasn't seriously injured as he had been wearing a helmet he had casually borrowed from the company when entering the tunnel. Ultimately, it took five hours to recover the bodies and bring them to the surface.

The following year Beecroft led the response to an industrial accident at the suburb of Alexandria where a young male worker was sucked feet first into a large meat auger. Trapped to his armpits and badly shredded, the young man was barely conscious when police arrived. Intensive efforts to release the man were successful yet he died while being conveyed to hospital. This rescue above all others would stick in Beecroft's mind:

> 'The fellow's main concern was for the people who were trying to rescue him. He told the constable who approached him that the floor and machinery were slippery and not to get hurt.'[144]

One of innumerable industrial accidents police rescue operators have attended. And unfortunately not every call results in the victim being rescued alive. In this case a worker was crushed to death by large crates that had toppled domino-style.

In late 1973 an unusual opportunity presented itself for the Rescue Squad to acquire a sister truck to Rescue 1. This truck, a secondhand fire engine, had a somewhat controversial history. Earlier in the year it had been purchased new by the NSW Fire Brigades and fitted out to be a mobile command post with compartments for additional equipment such as breathing apparatus. The layout and body shape was extremely similar to Rescue 1, the most notable differences being side access to the rear cabin (instead of rear access) and a standing platform affixed on the newer vehicle's roof. Like Rescue 1 the newer truck was an International ACCO but it had an automatic transmission. Because of an industrial dispute over staffing the truck, the union representing firemen immediately placed a ban on its use. The Brigades backed down and in October 1973 they offered to sell it to the police for a cheap price. Ministerial approval for the sale was 'readily obtained'[145] and within days Bill Fahey collected the fire engine from a nearby fire station.[146] Even though they had a new vehicle (now called 'Rescue 2') the police received no extra funds to modify its compartments, nor paint it. Bruce Gane and

Dick Lamb therefore begged, borrowed and liberated components such as steel offcuts, associated hardware and paint from the Government vehicle fleet yard.[147] Once it was fitted out and painted white, yellow and blue, the only hint of Rescue 2's fire service history could be seen inside the driver's cabin, where the metal framework remained the original colour of red.

Rescues 1 (right) and 2 at The Gap in late 1973 or early 1974. Until the squad found the funds to modify Rescue 2's stowage areas to fit Cliff Rescue Machine posts, the vehicle was only deployed to cliff jobs in support of Rescue 1.

The acquisition of Rescue 2, along with the equipping of the Toyotas with some basic sets of equipment, enabled the squad to be divided into pairs for the purposes of taking vehicles home at night. Having one vehicle allocated to two members who lived relatively close to each other meant that they were well placed to respond swiftly to after-hours calls throughout Sydney. This was important as there were insufficient numbers of rescue operators to roster nightshifts and most callouts were to the western, northern and southern suburbs (near where the men lived). When not at work the police would take the rescue vehicles home and remain in close proximity to their telephones. [148] In an era before electronic pagers (first introduced in 1975) and long before mobile phones (introduced

in the early 1990s), if a rescue operator needed to leave home they would first telephone VKG to advise the destination and phone numbers where they could be contacted. This put further pressure on marriages in which the husbands spent much more time attending work than being with their family.

English customs have heavily influenced the Australian way of life. A quaint tradition carried from the northern hemisphere is the hot lunch on Christmas Day. Christmas Day 1974 was no different in the Tyson household at Coogee. Unsurprisingly, during the family's festivities the sergeant received a work related telephone call. There were few days where Tyson or his colleagues weren't called-out to attend an incident. The surprising part of that day's call was the likely destination – over 3000 kilometres away in the Northern Territory city of Darwin.

The previous evening *Tropical Cyclone Tracy* smashed into the remote and poorly prepared city. As many as 200 people were feared dead (eventually the death toll was confirmed as 71) and scant early reports indicated total devastation of buildings and infrastructure. The recently established National Disasters Organisation assumed direct control of the recovery operation and they initially sought assistance from the police in NSW, the Australian Capital Territory (ACT) and Queensland. NSW was asked to provide one sergeant, 29 constables and a rescue vehicle.[149] Within the Force a senior officer decided to increase the contingent to 38 men, all of whom were to be rescue operators. Tyson had to politely inform the officer that there weren't that many operators in the entire organisation.

On Boxing Day a formal request for assistance was made and the day was spent packing and preparing for deployment. A decision was made to deploy almost every rescue operator in the Force while 'hoping that no serious emergency would arise in Sydney.'[150] Only five operators were left – Sergeant Swanny Ivaarson (Water Police) and Constables Hall, Gane, Raymond and Irwin.

First to leave at dawn on Friday 27 December 1974 were Fahey and Lamb who took a Land Cruiser full of equipment in the back of a RAAF C-130 Hercules transport plane. Also on the slow moving propeller plane were motorcycles and rations. The rest of the contingent, along with a group of nurses, flew out of Sydney on board a military Boeing 707 jet. The latter group arrived over Darwin first, late in the afternoon:

'The pilot flew around the city ... I expected that the cyclone

would have cut a path through the city. I was wrong, there was just nothing left.'[151]

Resembling images of Hiroshima and Nagasaki in late 1945, Darwin was a wasteland, albeit in a tropical and humid climate. Of 11,000 houses in the city, every building was damaged and only 400 remained habitable.[152] Part-time rescue operator Peter Robb looked out from his plane window and noticed:

'What looked like silver paper hanging from damaged power lines were galvanised iron and metal sheeting from rooves, twisted and bent.'[153]

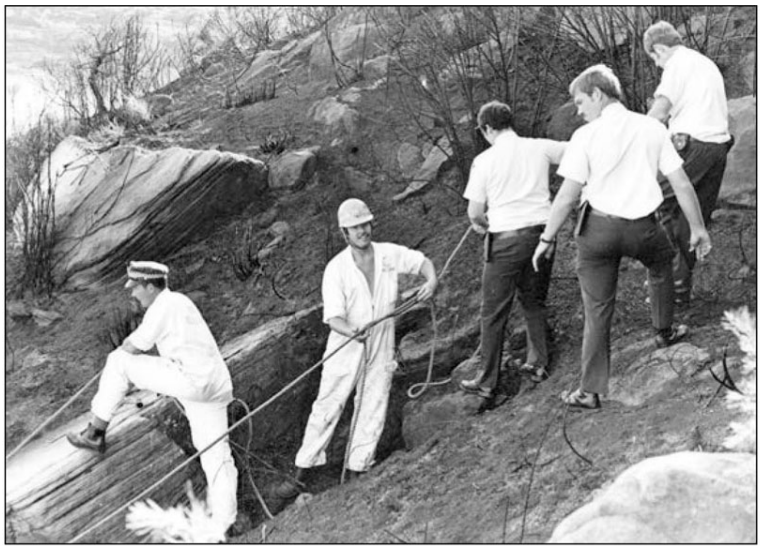
The city's infrastructure (including communications with the outside world) was virtually non-existent or at least not operational. Upon arrival, the NSW police were briefed that local firemen and police had recovered all the deceased. The primary role of the Rescue Squad instantly changed from search masters to caterers. With over 300 interstate police due to arrive in the following days, Tyson and his team fashioned an improvised field kitchen among the ruins. They acquired and built cooking facilities and were given the keys to some local shops and stores. This allowed them to corner the meat, barramundi and ice cream markets. World War II era enamel plates and cutlery from government stores were procured and to reduce the threat of disease (there was no running water or sewerage), a strict procedure was established at meal times. In turn, everyone had to first wash and rinse their hands and shake them dry, then take a plate and cutlery – wash them in hot water and dry them, before they could get their meal. No exception was allowed, not even for Prime Minister Gough Whitlam who made a lightning visit to the city some days later. Bags of lime were also secured with their contents scattered all over the ground to help reduce the threat of dysentery. Even this didn't prevent Dick Lamb falling sick for two days with gastroenteritis. In all, the entire police contingent of almost 400 interstate and commonwealth police were fed 'good tucker.'[154]

Just some of the devastation in Darwin. In this image police are sifting the remains of a warehouse.

On their first evening in Darwin the rescue operators searched for shelter to set up their stretcher bedding. An upper floor of a hotel had been allocated however all its rooms had been badly damaged during the cyclone, windows were destroyed and the carpets waterlogged. The men instead found a small space within the damaged Government Printing Office and improvised some weather protection. The building had the only working telephone line in the city at the time, which was used to contact family in Sydney and to place orders with the Rescue Squad for extra equipment (which were taken to the RAAF base at Richmond for dispatch on the next available flight). For the rescue operators in Sydney, the acquisition and couriering of equipment was only a small part of their busy work schedules. They still had to respond to calls for assistance throughout the city, ranging from attending fatal road crashes to an explosion at a suburban house, a body recovery, two unrelated suicide attempts at The Gap, a woman with her arm trapped in a poker machine, and a call to locate a goanna reported to have attacked a person at Maroubra!

Meanwhile, in Darwin the humid temperatures and lack of infrastructure such as washing machines and showers meant that, much to the horror of some senior officers, many police quickly stopped wearing their full uniforms and adopted a more casual approach of shorts, singlets and boots. Showers involved standing in

the rain and bedding was rudimentary. For eight days the rescue operators lived in the ruins, they prepared four meals a day, delivered in a shift system. When not catering, the men used their generators to provide power to various buildings and machinery, including to the teleprinter in the Reserve Bank building, the city's main information link to the outside world. The squad also joined in patrols of the city, assisting on one occasion in the arrest of a small band of interstate looters. Eventually the emergency phase of relief operations were scaled down and the men returned to Sydney on Saturday 4 January 1975. There they had a few hours of rest before returning to work.



A rescue operation a few weeks after the return of the squad from Darwin. Bruce Gane (left), Gary Raymond and general duties police wait for the command to commence hauling a teenage boy from the base of a cliff at Dobroyd Head, Sydney, on 26 January 1975. Two boys became trapped on a ledge by rising tides. Joe Beecroft couldn't physically reach the boys but he was able to get close enough to tell them how to tie the ropes around their waists. In turn, both boys were hauled up the cliff face.

THE SQUAD'S INVOLVEMENT WITH THE VOLUNTEER RESCUE ASSOCIATION

The important place the Police Rescue Squad carved out for itself in Australia's rescue community was achieved as much by the training and mentoring role it took on with other organisations, as the dramatic or spectacular rescues undertaken by police rescue operators. In the 1960s Tyson's team regularly trained new ambulance rescue operators in Sydney, and travelled to Canberra on several occasions to guide the newly formed ACT Police Search and Rescue Squad. During the decade the men from Redfern also trained, mentored and advised a number of independent rural volunteer units that had been established by concerned local residents in the state's south and west. These teams of unpaid volunteers, especially those in Albury, Dubbo, Narrandera and Wagga Wagga, relied solely on community fundraising and donations to operate a variety of equipment to conduct the types of rescues and body recovery operations that the police performed in the Sydney region. These volunteer teams were a critical asset to their local communities and were strongly supported by the police in those regions.

Ray Tyson and Bill Fahey began their association with the Dubbo Rescue Squad just prior to the latter's official formation in 1962. Local grazier and then chairman of the Dubbo District Ambulance Service, Mr Max Walters, had unsuccessfully lobbied senior police to establish a police rescue unit in the city. With neither the Dubbo District Ambulance Service nor the Fire Brigades keen to form rescue units of their own, Walters worked with like- minded residents to raise £2,000 for rescue equipment. Copying the efforts of Gary O'Callaghan with the ambulance Q-Van in Sydney, Walters and his colleagues mounted a fund raising event over June weekend (including holding a parade that included both O'Callaghan and the Q-Van) to show the community what was being sought. With the money raised and orders for equipment lodged, Walters used family contacts[155] to obtain senior police approval for Tyson and Fahey to travel to Dubbo to conduct basic training for the new team.

The size and capability of the Dubbo Squad gradually grew and in 1967 Walters began to correspond with Mr George Bellings, the

leader of a volunteer rescue unit at Wagga Wagga. Over time this contact led to the proposal for a gathering of members from both team to train with and learn from each other. Walters again sought police assistance: Commissioner Norm Allan invited the teams to the Police Rescue Squad base in Redfern over the 1968 October long-weekend. This meeting was a success, with a range of joint training exercises undertaken including using the Cliff Rescue Machine at The Gap and discussing technics to recover submerged bodies from rivers and dams (something the country teams did more often than the police).

A second conference with 29 delegates from the Albury, Dubbo, Narrandera and Wagga squads, and the Federation of Bush Walking Clubs, was held at Redfern on the October long weekend the following year (4 – 6 October 1969). In addition to a range of briefings and presentations on various police and fire brigade units, and a training session with the Cliff Rescue Machine at Watson's Bay, the volunteers spent the Monday debating the merits of affiliating into a peak body. Such a move had been strongly encouraged for some time by the police commissioner, and the delegates ultimately agreed to form the NSW Volunteer Rescue Association (VRA).[156] The constitution endorsed at the meeting included the basic tenants of saving, preserving and protecting human life; cooperating with commonwealth and state authorities as required; promoting the standardisation of equipment and improvement of rescue techniques; and, promoting and cooperating with organisations whose aims and objectives are compatible with and do not inhibit, those of the VRA.

The formation of the VRA had been accompanied with an undertaking by Commissioner Allan that the police would maintain close training, mentoring and operational links. This commitment was typified by Allan allowing Tyson to accept the VRA's invitation become the organisation's patron. While each Police Rescue Squad member came to be involved at various times in the training of VRA land rescue units, Tyson proved the lynchpin on a range of policy and organisational issues. On numerous occasions over several years the sergeant travelled to various parts of the state when representations were made to establish a new VRA unit. Tyson, along with other senior VRA officials, met with councils, community and emergency groups to ensure there was strong local support and understanding of the work required to raise, train and sustain an all-volunteer unit. This was critical, for the VRA received no funding from the NSW

Government. If local community support translated into the actual formation of a squad, Tyson ensured adequate training was provided either by police rescue operators travelling to the town or (increasingly as the years passed) new squads attending training sessions either at Redfern or at one of the more experienced VRA squads.

By 1977 the VRA had expanded to 35 active squads offering a mix of land and sea rescue capacity, with a total of 1200 active volunteer rescue operators, 600 of whom were attached to a land rescue unit.[157] Most VRA teams were located in rural NSW, although a squad was formed in Penrith (to Sydney's immediate west), one on the Central Coast between Sydney and Newcastle, and another in Wollongong (to Sydney's south). Specialist VRA affiliates included the NSW Bushwalkers Federation Search and Rescue Section, the NSW Caves Rescue Group, the Royal Volunteer Coastal Patrol and the Off-Road Vehicle Federation Search and Rescue Group. The close relationship forged between the Police Rescue Squad and the VRA during the 1970s continues to this day.

ENDING ONE ERA – STARTING THE NEXT

The Police Rescue Squad's last direct link to its wartime operations came to an end on Friday 19 February 1976 when Sergeant First Class Ray Tyson retired. Tyson was an outstanding all-round rescue operator who was a driving force in the development of the Rescue Squad. His administrative and organisational skills had been of immense benefit for decades; his commitment to the team, to the community, and his operational rescue skills, were without question. Often with a no-nonsense approach but more than capable of having a laugh, Tyson had firm views and a direct manner. He had spent 30 of his 35 years as a police officer undertaking rescue duties either part-time or full-time, with 15 of those years as the squad's OIC. As the OIC, Tyson led a team that dramatically enhanced its skills and capabilities across the broad gamut of rescue and support operations. His efforts and commitment were well acknowledged. In 1948 he had been awarded the Kings Police and Fire Service Medal for his rescue work – a high accomplishment for a then constable. After leaving the Force, Tyson was awarded the British Empire Medal (civil) in June 1976 (for services to the community), the Order of Australia Medal in 1995 and the Emergency Service Medal in 2000 (the latter two for his VRA service).

Like all the members of his unit, Tyson had sacrificed a considerable amount personally to do his job. Yet he felt compelled to continue helping the community after retirement. In addition to his role as VRA Patron, Tyson became that organisation's Honorary Director of Training and performed the role for 17 years. Travelling the state to oversee training programs, he was openly referred to within the VRA as 'father', reflecting the driving role he played in the formation of the organisation and the creation of many of its squads.[158] Ray Tyson remained VRA Patron until his remarkable life came to an end on Wednesday 25 May 2005.

Tyson's retirement began a period of fluidity within the Police Rescue Squad's command structure. A proposal to promote a rescue squad operator (most likely Joe Beecroft) to inspector to head the unit was shelved.[159] Instead, Beecroft temporarily led the team until the arrival of Sergeant Swanny Ivaarson on transfer, a highly experienced water policeman and long-time head of the Flood Rescue

Squad who had worked with Harry Ware's team briefly during the 1950s. At the same time, the Rescue Squad was put under the administrative command of Inspector Darryl 'Ray' Williams who additionally held responsibility for VKG as well as the Force's emergency planning and liaison with other agencies. Williams had not been a rescue operator himself but he knew the squad and its personalities as he had led them and other NSW police in Darwin. He did not have the time to be intimately involved with day-to-day rescue operations so he delegated such duties for a time to Beecroft and Ivaarson, with Bill Fahey remaining an important part of the squad's leadership group as he was promoted to Sergeant Third Class.

The Rescue Squad's reputation ensured it remained in high demand throughout the 1970s. Yet the coverage it was able to give was limited in a city whose population was approaching three million. Nevertheless, the team responded to all calls received, no matter where they occurred throughout the state. On Saturday 11 May 1974 for instance police were notified of a badly injured fisherman at the base of a 50 metre cliff near Bateman's Bay, almost 300 kilometres to the south of Sydney. Bad weather and rough seas prevented the use of a rescue vessel and police were unable to source a helicopter. Around 6:30pm Beecroft, Dick Lamb and recently recruited team member Constable First Class Bruce Gane set off in Rescue 1 and a Land Cruiser:

> 'It was nothing to get calls like that – down the coast, up to Gosford, up to Newcastle up to the mountains, Bathurst and Lithgow ...'[160]

The drive to Batemans Bay was memorable for the fact that Rescue 1's three sirens failed during the three-and-a-half hour *blue light run.*

> 'We had three sirens, we had alternating horns, we had the old standard conventional ones and ... the first electronic ones in the police. The alternating horns lasted until we got to Kogarah, they burnt out, ... we put the electronic on, that lasted until we got down to around about Engadine ... and then we had the other one and that burnt out around about Sutherland!'[161]

The three arrived at Batemans Bay around 10pm: local police guided them to the top of the cliff. In darkness the rescue operators made their way to the base of the cliff and saw that the tall man weighed around 130 kilograms and was suffering from very serious injuries.

Lamb and Gane carefully secured the fisherman into a stretcher while Beecroft returned to the top to form and supervise a hauling party of local police, ambulancemen and volunteers. A rope was lowered and tied to the stretcher; Lamb and Gane tied themselves to each end of the stretcher and walked it up the cliff as they were all hauled via the main rope. At the top the victim was taken to hospital and the three rescue operators immediately headed home, arriving at dawn and in time to start their rostered dayshift at Redfern.

The Sydney squad was not the only group experiencing a significant increase in operational tempo during the mid-1970s. The number of calls attended by rescue operators in the Blue Mountains were similarly on the rise, and many calls lasted for days at a time. Typical of the type of work facing police was a search for a missing 75-year-old woman that commenced on Saturday 29 November 1975. Her body was eventually located at the base of an eight-metre cliff but only after days of searching by over 60 police, rangers, volunteers and a RAAF helicopter. Another protracted call occurred in the evening of Friday 16 January 1976 when two trains collided at the western side of the Glenbrook rail tunnel in the lower Mountains (one person killed). The following month rescue operators from the mountains travelled to Brewongle near Bathurst to recover the body of a 69-year-old woman who had fallen to the bottom of a 30-metre well. As envisaged when it was formed, the part-time squad responded to calls far and wide in their region and at times beyond, from Parkes to Glen Alice, Picton and to the Barrington Tops.

Ernie Sanderson leading a training sessions in the Blue Mountains.

The diversity and frequency of work undertaken by the Blue Mountains team was such that by 1977 they had acquired enough equipment to warrant the construction of a special four wheeled trailer. Housing a generator, lighting set, hydraulic and roping equipment, the trailer was left at the Katoomba Police Station in the Upper Mountains, and towed to a rescue call by the squad's Land Cruiser (the only police vehicle at the time that could tow such a heavy weight). By the late 1970s they were able to surreptitiously acquire a second police Land Cruiser and some extra rescue equipment, and base it at the Springwood Police Station. This lowered response times to emergency calls, especially the relatively high number of road crashes in the Lower Mountains.

Although still associated in the public mind with the daring cliff rescues undertaken during the days of Harry Ware, the professionalism and proven ability of police rescue operators to undertake a wide range of tasks, enhanced their reputation throughout the community. By the mid-1970s many local community leaders and police sought to have a police squad established in their locality. Successive police commissioners had resisted such calls

however an increasing awareness of the general dearth of rescue capacity in the state convinced Commissioner Fred Hanson to change his mind. In 1976 he agreed to establish new units in Wollongong and Newcastle (the state's second and third most densely populated areas), and at Goulburn in the Southern Tablelands. With government support, directions were issued that these teams would be (like in the Blue Mountains) part-time in nature, would draw upon locally based uniformed police, and would be equipped to conduct road, bush, cliff and any other class of rescue as approved by the local superintendent of police.[162] Additionally, the size of the Redfern team would be doubled or more. It was an exciting and unprecedented prospect for the handful of men tasked with implementing a training and equipping regime. With a delivery date target of mid-1977, they didn't have much time to plan. And it was at this crucial point in time that the squad faced its most serious operational challenge to date.

THE GRANVILLE RAIL DISASTER

To a generation of Australians the word *Granville* evokes images of urban carnage and tragedy, of an intensity hitherto unknown in Australia outside of wartime. The event, a train derailment and bridge collapse at 8:12am on Tuesday 18 January 1977, proved itself to be a watershed in the history of rescue and disaster management in NSW, and for the Police Rescue Squad itself.

Travelling at 78 kilometres per hour, an inter-city commuter train derailed on curving tracks at the base of a narrow embankment, less than 20 kilometres from the centre of Sydney. In derailing, the train's locomotive sheared a nearby mast supporting overhead electrical wires. Suspended by the wires it was supposed to be supporting, the metal beam acted like a can-opener as it tore through the wooden and metal superstructure of the train's first carriage. The carriage, indiscriminately bludgeoned almost beyond recognition, came to a stop clear of an overhead road bridge. Within the carriage's shredded superstructure lay eight dead and 34 injured passengers.

While the remaining carriages of the train came to a halt with no casualties, the derailed locomotive had also obliterated the support trestles to the overhead Bold Street Bridge. After only a few seconds the northern half of the 570 tonne bridge collapsed onto the train's third and fourth carriages, which between them were carrying 141 men, women and children. The sheer weight crushed the carriages; in a fraction of a second the superstructures of both were reduced to a height that in some places was no more than 25 centimetres. As the noise of the collapse subsided, the screams of the injured and trapped echoed from the wreckage and under the rubble.

Within seconds stunned onlookers flocked to the scene to help rescue the trapped and injured. Railway signalmen who saw the event also activated their emergency procedures, 'thus setting in motion with remarkable rapidity a rescue operation of extraordinary size and complexity.'[163]

The Granville disaster site from above and on the ground.

Firemen, ambulance officers and general duties police were the first emergency workers to arrive. They were joined minutes later by

Dick Lamb, off-duty but who had been driving nearby with his wife and children when he heard the first reports of an incident on commercial radio. Upon seeing the site, the policeman told his family to continue their journey.[164] Wearing shorts, tee shirt and casual footwear, Lamb descended down the cutting to reconnoitre the carriages partially covered in rubble:

> 'My mind was racing, the air was full of dust ... I thought of my training, do the most good for the most number. I made an assessment of the area and the problems to be faced, I did not stop to help. I vividly remember the sounds coming from under the bridge in carriages three and four and the carnage I was seeing ...[165]

Scrambling back up the embankment to find a police car, Lamb radioed a report to VKG, seeking the deployment of all Rescue Squad personnel. He then returned to the carnage:

> 'It was not just what I saw but what I could hear ... the human suffering was dreadful in those first 10 minutes.'[166]

Shortly afterwards Lamb was joined by Bruce Gane who had been driving Rescue 2 to work from his home in Moorebank, when VKG redirected him to Granville. An ex-ambulance officer and previously a machinist by trade, Gane had worked closely with Lamb since the former joined the Rescue Squad in 1974. Therefore, by good fortune, one of only the state's two heavy rescue vehicles with two highly skilled operators were on-scene within the first 20 minutes of police being notified of the tragedy. Upon seeing Rescue 2 and Gane, Lamb grabbed a chainsaw from the truck and the two set about cutting part of carriage three's roof so as to free some of the trapped passengers.

At the time of the derailment Bill Fahey was off-duty and having a shower in his flat that was adjacent to the Redfern police barracks. A colleague ran into the unit in to tell Fahey the news:

> 'He said . . . "there's something big doing with a rail bridge, there's a train involved in it, hurry!" so I jumped out of the shower, pulled a singlet and underpants on, a pair of overalls and boots and away I went.'[167]

Gary Raymond later recalled setting out in Rescue 1:

> 'We thought it was a goods train stuck. We left immediately and then the message came through it was a casualty situation with one injured. As we went on, the casualty numbers

increased. When we got there, it was like an ants nest, with people injured and people coming from the community helping.'[168]

By 9am seven members of the squad were at the scene. They were later joined by five police rescue operators from the Blue Mountains, led by Ernie Sanderson.[169] Inspector Ray Williams soon arrived at the scene to take overall charge of the rescue operation. Williams had flown to Granville in a rescue helicopter and immediately set about making detailed inspections of the site, conferring with key personnel including Beecroft and Fahey. In a film documentary the inspector said:

'I couldn't believe there'd be anyone alive underneath. And then I went in underneath and found this hell on earth.'[170]

In his subsequent official written report Williams wrote:

'The dead were everywhere.'[171]

Once the walking wounded had been removed from the site it became apparent that trapped among the scores of deceased bodies were 11 badly injured men, women and children. On advice from engineers, Williams formed the view it was too dangerous to use heavy machinery to break-up and remove the slab that had crushed the two carriages. Rescues would have to be undertaken with hand-held equipment.

By this time multiple agencies had personnel at the site.[172] Several mixed-service teams were formed around experienced police and ambulance rescue operators. These teams moved as far as possible into the dark tunnel of rubble that had formed around the two carriages. Those at the front of the lines ferreted through the detritus of metal, concrete and wood, and the multiple bodies sandwiched to the floors of the carriages. They crawled into the smallest of spaces and gaps, often laying in the prone position for hours on end, using just their hands and small tools to clear debris in order to free victims. Joining them were medical staff from surrounding hospitals and ambulance officers who worked to administer blood, plasma and the drugs essential to keeping victims alive. In one instance they conducted an amputation on a corpse to enable rescuers to reach a live person trapped on the other side of the body.

Joe Beecroft reaching for a sledgehammer while a general duties policeman swings his sledgehammer to hit a part of the bridge's wall that impeded access into carriage three. Volunteers and an ambulance rescue operator watch on. This was early in the operation, before it was realised the most effective way to access the carriages was from underneath.

Centimetres of progress were paid for in hours. In a later interview Beecroft was asked what was the most deeply lingering memory of the event. The then 59-year-old's response was:

> '... it is the memory of an old man, an old man whose face I never saw, but the feel of whose hand will stay with me for as long as I live. ... [The man said] "Don't worry about me. I'm an

> old man and I am dying. Go and save those who still have a chance. But before you go, will you hold my hand for a moment? Will you hold my hand before I die?"'[173]

The sergeant held the man's hand for a time and then moved on. Sadly, this was not the only victim that day who died awaiting rescue, invariably with rescuers in close proximity yet unable to reach them.

As time passed at the site temperatures in the filthy catacomb-like rubble soared. Further hampering rescue efforts and providing what Inspector Williams later said was a "great sense of frustration"[174] was the presence of liquid petroleum gas, carried in bottles on each carriage for heating purposes, and leaking from the bottles on carriages three and four. The gas lingered for hours; it not only prevented the use of oxy-acetylene equipment, non-carbon saws and generators, it gave many rescuers (and victims) serious headaches requiring medical treatment. Breathing apparatus could not be used because of the cramped conditions. A high expansion foam unit set up by firemen was rigged to pump fresh air into the rubble and push the gas out, but its effectiveness was limited because of environmental factors.

At one stage during the morning, parts of the bridge's damaged concrete slab dropped about five centimetres, crushing one of the police's hydraulic rams 'like butter'[175] and briefly pinning two rescue operators. Fearing that the bridge was about to collapse again, Williams ordered a temporary evacuation. Many refused to obey, preferring to stay with their patients until the all-clear was given.

Ten hours after the crash the last survivor, 28-year-old Mr Brian Gordon, was carried from the wreckage and taken to hospital. Gane had located the man by chance early in the rescue operation, the policeman had been working with four general duties police to remove two live victims and four bodies when he noticed Mr Gordon's hand protruding from rubble. The father of a four-year-old daughter was horrendously crushed by a large steel girder. Gane and medical staff spent almost all of the subsequent nine hours working to free the man. Eventually, sufficient debris was removed to allow a railways emergency crew to lift the girder with a crane, high enough for the man to be pulled out from his predicament. A feeling of quiet satisfaction turned to distress some days later when police learned that Mr Gordon died in hospital.

An unknown police rescue operator examining carriage four.

After Mr Gordon's rescue, Inspector Williams pulled all personnel from the carriages and ordered all machinery be turned off. The inspector and a colleague then went under the slab on two occasions, each time calling out repeatedly to hear if there were any voices. The lack of response to their calls, combined with the information provided to them from rescue operators, doctors and engineers, satisfied Williams that no one was left alive. The rescue operation turned into a body recovery mission.

The inspector authorised Blue Mountains police rescue operators and demolition crews to use jackhammers and oxy-acetylene equipment to collapse the southern part of the bridge (the portions not above the carriages). The slab was then broken into smaller (but still large and heavy) pieces, to be lifted and removed by industrial cranes. Suggestions to use heavy industrial equipment on parts of the bridge that directly covered the carriages were dismissed by Williams as he wanted to ensure as much dignity as possible was preserved in locating and removing the deceased. To achieve that, when demolition crews removed a part of the slab that revealed a victim, work would temporarily halt to allow the increasingly exhausted

police rescue operators and scientific police to move to the spot. Once photographs were taken for identification purposes the operators (their overalls blackened by soot and grease) placed the victim into a stretcher and carried it to a nearby temporary mortuary. Over 60 bodies were recovered this way; the operation was methodical and lasted through the night:

> 'The only break we got was when they were lifting the slabs. ... I'd crash for an hour and then get up again.'[176]

At 3:20pm on Wednesday 19 January 1977, 31 hours after the crash, the last body was removed. Seventy-five of the 141 passengers in carriages three and four died in the collapse of the Bold Street Bridge. A total of 83 people lost their lives as the result of a few seconds of devastating carnage.

Granville tested Sydney's emergency services to the limit, each found it had lessons to learn. For police the major lesson was the initial inability to coordinate and control the site. Over 200 police were present the height of rescue operation; disaster victim identification (DVI) and property collection duties were carried out thoroughly and professionally.[177] Crowd control however was non-existent for the first few hours with police failing to control access and egress. Seemingly almost anyone could enter the embankment area during the first morning.

> 'We had people coming down ladders walking all over the concrete ... getting in the way trying to get underneath to have a look.'[178]

An edited photograph of the body recovery operation. Swanny Ivaarson (left) and Bill Fahey (right) lead police in the recovery effort on 19 January 1977.

The lack of site control extended to the surrounding streets where rescue and emergency vehicles were parked. All rescue units – the Police Rescue Squad included – had amounts of equipment stolen from their vehicles. Further, inter-agency rescue cooperation and coordination was limited and overly reliant on radio communications. The portable radios of the era were too large to use in the rubble and rescuers had to shout for help, with messages being relayed by runners or passed along human chains.

A lot had been expected from just a very few officers. Williams for instance did his best to lead the operation and was widely regarded for his efforts, but throughout the day he was constantly busy and didn't have a large command team to support him. He also faced a problem with too many people wanting to help:

> 'People all seemed to be seized by the desire to assist, but it wasn't possible for them all. I [also] had the problem of people of the services who were transfixed by the enormity of it. We had to politely but firmly ask them to go.'[179]

Police doctrine would subsequently be developed to better articulate the requirements and procedures for command and control arrangements at emergency and disaster sites. Interagency exercises would also be stepped up to practice joint operations.

One of the contributing factors to a sense of interagency confusion was the absence of legislation that gave police specific command authority in a disaster situation. In fact at that time no service had legislation explicitly empowering them to undertake rescues or coordinate emergency responses.[180] Using Granville as a case study, Police Commissioner Mervin Wood successfully lobbied the NSW Government to give better definition for police operations. In March 1978 section 7A of the *Police Regulations Act of 1899* was amended to state:

> 'It is, and shall be deemed always to have been, the duty of a member of the police force to protect persons from injury or death and property from damage, whether the persons are, or the property is, endangered by criminal acts or otherwise.'

The amendment both gave legal protections for police working in good faith and it codified for the first time the inherent duty of policing undertaken since its inception in NSW – the protection of life and property.

While the already strong reputation of the Police Rescue Squad was further enhanced through the excellent work of its members at Granville, it came at a cost. The trauma faced by the team amidst the debris, combined with a lack of rest, to push the men to their absolute limits (and in some cases arguably beyond). So unstable was the site that during the day each member had personal brushes with death or serious injury, and long after the adrenaline surged from their systems, they had to push through sleep deprivation to continue their work. For every person they rescued, the men were frustrated and distressed by the scores they couldn't help. Each was deeply affected by his experience but they mostly kept it to themselves. This was a time that pre-dated the debriefing and post-incident counselling support regimes now identified as essential for emergency workers. Amidst the professionalism and devotion shown on the day, there were many cases of physical and psychological injuries[181] – the latter not becoming readily apparent for many years.

Joe Beecroft, his overalls blackened by soot and carnage, among rescuers but looking to the top of the embankment on the day of the crash. Although he was in his late 50s, Beecroft led from the front in gruelling circumstances from beginning to end. Behind is fellow squad member John Wilson.

Operationally, the enormity of the situation revealed to rescue operators the limitations of their equipment, even though it was the best available at the time. The team's innovation and improvisation had been successful in an overall sense yet some of their techniques had to be improved. One of the curious medical lessons for all agencies was the impact of 'crush syndrome' – the physiological reaction of a body releasing dangerous toxins when the pressure on that body from a crushing injury is suddenly lessened.[182] Seven Granville victims suffered crush syndrome, three died (including Brian Gordon).[183] There was limited knowledge about the syndrome before 1977 but the severity and number of cases encountered in one incident surprised the medical and rescue community.[184] Training programs for all the services were subsequently tailored to ensure that the syndrome, along with other relevant medical conditions, were dealt with in greater detail.

PREPARING FOR EXPANSION

Although approval to establish the three new so-called decentralised rescue units (which quickly came to be commonly called ‘de-cents’) had been granted in 1976, it was during the first half of 1977 that planning and preparations were significantly ramped up. Equipment and vehicles had to be sourced, training curriculum developed and agreement reached on governance documents. By early 1977 it had also been decided to establish additional de-cents in the outer Sydney areas of Hornsby (to Sydney’s north) and Liverpool (to Sydney’s southwest). Even more de-cents were proposed.

With the Rescue Squad still containing only a few handfuls of staff, some former and part-time members were called upon to help prepare for expansion. Sergeant Peter Robb was one who had worked at Redfern on-and-off since the late 1960s and chose to return from a period of detective duties. Arthur Ackroyd similarly returned from general duties at a suburban station. During this period Dick Lamb also left the unit for six months to undertake general duties policing in the city, but came back where he assisted Bruce Gane and Bill Fahey, the squad’s newly designated training team.

Foremost in their minds was the physical distance between Redfern and the de-cents that were to be established outside of Sydney. While they could back-up a Sydney de-cent at an incident (as none were located more than 30 kilometres away), the provision of assistance to a country unit would by necessity be restricted to only the most serious of events, and even then it could take hours to reach the location. The long-practiced on-the-job buddy system with little (if any) formal training (used since the late 1950s) could not be replicated in far away units where almost everyone had no rescue experience.

Existing training materials amounted to little more than the pamphlets provided by equipment manufacturers, and various riggers’ guidebooks. Further, the civil defence courses the men had previously undertaken, and which for many years they had delivered to other police, covered either rudimentary rescue techniques or focused on the organisation and planning of mass casualty rescue operations – not conducting them. The team therefore had to draw on their experiences and discussions with subject matter experts,

including experienced former rescue operators, to develop a curriculum and to write training materials.

An innovative and effective three-week basic rescue training program (officially designated a light rescue course) was produced. The overriding thinking was that as highly experienced practitioners, the instructors were responsible for showing the students the most effective and pragmatic rescue techniques, explaining why the technics were effective, demonstrating how to use the equipment safely and above all else, transferring this knowledge. A limited amount of textbook theory was presented however the course was mostly hands-on for the students, to give them the knowledge and confidence to face the rigours that lay ahead. The subjects taught included roping, hydraulics, road, domestic and industrial (including rail) rescue techniques, how to use breathing apparatus and gas suits, along with general search and rescue principles.

Through intensive scenario training and practice, students gained the confidence to undertake their tasks safely. Then squad member and ex-ambulance officer Gary Raymond remembered the lessons he delivered on patient care:

> 'I used to go to the butchers and get a spinal cord and I'd bash it over the end of the desk in the classroom and fracture the vertebrae. Then I'd show each trainee what movement of the vertebrae did to the canal which contained the spinal cord.'[185]

The first course began in April 1977 and finished in early June. The second started a week later. Each man was a volunteer, had successfully passed a written and physical assessment test and then completed a week-long St. Johns first aid course prior to starting the rescue course. It was still preferred for police to have previous trade or rescue experience however staffing levels at the smaller units meant that this could not be a mandatory requirement.

For the three weeks, the students trained and studied almost 16 hours per day. There was no opportunity to coast. Minimum pass marks were set at 80 per cent per exam, each exam thoroughly assessed the men's understanding of their equipment and procedures. The exams were both written and practical:

'They really worked their butts off and we worked them hard.'[186] This sentiment was shared by course members. Then Senior Constable John Byers was a member of the second class and recalled the pace and intensity of the course:

> ‘The course changed my whole way of thinking … it was fairly difficult and there was a lot of work to it … [the instructors] pushed us along but they really wanted us to know what we were on about.’[187]

An incident from his course that stood out to Byers was the class attending to watch a protracted rescue operation in Sydney’s Central Business District, where a worker emptying bins into a garbage truck was caught in the vehicle’s hydraulic scoop. Wrenched by his arm into the truck, the man narrowly avoided being crushed but his limb was severely broken and wrapped around the mechanical crushing equipment. The quickest way to release the man was to use oxy-acetylene equipment but this risked igniting flammable garbage inside the vehicle. Instead, experienced rescue operators spent hours in the garbage, working to dismantle the machinery pinning the man. Byers’ class attended the incident to watch it unfold; the main lesson (apart from the technical aspect to the rescue) was the willingness of Bill Fahey to argue with attending doctors against their preference to amputate the victim’s arm. Fahey insisted that he and his team could effect the rescue and pleaded with physicians to focus on patient care rather than amputation. Eventually Fahey was proven right. The compacting machinery in the truck was sufficiently dismantled to free the man. Although badly injured, he ultimately retained the use of his arm.[188]

The original training team at Marrickville – Bruce Gane (left) and Bill Fahey inside the Marrickville base in 1978. Whenever not involved in the planning or conducting of training the two (and their successors) would undertake operational shifts.

The classroom segments of each course were conducted inside the Rescue Squad's new base in the suburb of Marrickville, five kilometres southwest of Redfern. The move from Redfern to 35 41 Addison Road Marrickville had begun in late 1976 as part of the lead-up to expansion and introduction of the de-cents. It was certainly long overdue as Redfern had become hopelessly overcrowded. During Harry Ware's time the unit had moved from occupying a small and dingy garage within the complex to a disused wireless room. In the 1960s they again relocated, this time into a larger garage in the main building, and subsequently expanded to occupy almost the entire floor above that garage except for a small area occupied by the Police Rule Book Section.[189] After much searching, a large non-descript warehouse on Addison Road was selected. Previously a furniture factory and showroom, with an adjoining nightclub, the building had enough internal floor space to (just) fit the squad's vehicles, caravans and equipment on the ground level. Above this area sat a mezzanine floor for offices, classrooms, a meal room and ablutions. After entering into a lease the Force constructed an industrial kitchen for catering operations and an elevated training platform to allow limited roping training to be conducted. Also built were a series of workbenches and equipment bays for operators to design, build and

maintain kit.

The move wasn't enthusiastically embraced by the entire team. Several preferred Redfern for its closer proximity to the cliffs and were less than thrilled with the new building being directly under a flight path to the nearby Sydney Airport, with the resulting noise and vibrations. This proximity to the airport however was one of the main attractions of the building to senior command – the Rescue Squad had been allocated primary rescue responsibility alongside aviation fire services for responding to airport disasters, and consequently were required to be located close by. All staff and equipment were moved to Marrickville before mid-1977.

By the end of that year the Rescue Squad had increased in size from eight full-time members to 12, then to 14, and by 1980 to 24. With 14 operators the squad could staff a day and afternoon shift most (if not all) days of the week, each eight-hour shift consisting of a minimum of three operators – two to staff a truck and one to remain at the base to operate radios and coordinate resources. Twenty-two operators enabled 24/7 coverage yet most rescue vehicles were still taken home at night in an on-call roster system.[190]

The command arrangements for the Marrickville squad continued to evolve during the late 1970s. In October 1977 it was placed under the newly created Disaster and Rescue Branch. Initially headed by recently promoted Superintendent Ray Williams, the branch had portfolio responsibility for coordinating all the emergency services provided by the police, and led police contributions to interdepartmental disaster planning and associated interagency exercises. In 1979 the Branch assumed responsibility for the Police Air Wing (PolAir) and the Dog Squad, and later the Water Police (including police divers). Joe Beecroft retired in October 1977[191] and OIC Swanny Ivaarson retired not long after that. This led to the OIC position being taken up by Sergeant Ross Nixon, a detective otherwise working for Williams.

One of the most difficult administrative issues to address was the relationship between Marrickville, the Disaster and Rescue Branch, and the de-cents. Marrickville held overall responsibility for the supply, maintenance and disposal of all the department's rescue equipment, vehicles, personal protective equipment for rescue operators, and the provision of major rescue training programs. The day-to-day management of the police attached to the de-cents remained the responsibility of district commanders; they were

supposed to exercise this responsibility for rescue matters in conjunction with the Disaster and Rescue Branch's superintendent. Further, in theory, the rosters for the de-cents had to be approved by the district commanders in consultation with Marrickville's OIC (who was at a more junior rank). This was to ensure sufficient numbers of operators were available to be called out, at all times. The reality didn't always reflect the theory however, and it took effective personal and professional relationships at all levels to make this potentially cumbersome structure effective.

At actual rescue operations involving two or more teams, cooperation was invariably effective. Responsibility for leading the rescue was determined by a mix of whose area of responsibility the incident occurred in, the experience levels of the rescue operators present, and the rank of the police officer in overall command. Given the relatively small size of the rescue fraternity, everyone knew each other and there was seldom disagreement as to who took the lead.

DECENTRALISED OPERATIONS COMMENCE

Goulburn was the first de-cent to formally receive their vehicle and equipment. On Monday 17 October 1977 Premier Neville Wran attended a ceremony at the Goulburn Police Station where he met the unit's members and their families, and officially handed over the keys to a V8 Ford F350 rescue truck. In his speech the premier said:

> '[Many people are too] quick to criticise the police force, without being aware of the pressures under which they work, the risks they take and the job they carry out. ... The government is fully behind you in the execution of your duty.'[192]

The ceremony went off without a hitch but true to the history of police rescue operators having to improvise in challenging and unforseen situations, Goulburn's first callout had actually occurred four months earlier. On Monday 13 June 1977 three friends set out to shoot feral animals on a large bush property called Curraweela, to the north of Goulburn. Within hours one of the group, a 31-year-old man, became separated and lost. Neither the friends nor local police could find the man so they called for assistance. At daybreak the following morning, nine of Goulburn's 10 operators and a radioman set out on foot to comb the area. Only one of the team, Constable First Class Robert Hewitt, took his sidearm. After a few hours of fruitless searching in thick scrub Hewitt decided to use an old bushman's trick. He drew the revolver from his holster and fired two shots into the air. Hewitt had not warned his colleagues beforehand; the now startled police were ducking for cover when two shots were heard in the distance. The reply had come from the missing shooter. Within minutes police were able to locate the man and later reunite him with his family.

Wollongong was another de-cent that started operations weeks before being issued with equipment and a vehicle. On Tuesday 4 October 1977 the Homicide Squad requested a body retrieval operation be conducted from a cliff near the city. The entire team turned out so as to gain experience. Rescue 1 was also sent from Marrickville so as its equipment could be used. On the way all were diverted to a serious car crash where one person died and another

was trapped. After extricating both victims from the wreckage, the police continued to their original call.

Official commissioning ceremonies similar to Goulburn's were conducted for the Hornsby, Newcastle and Wollongong de-cents in December 1977. Liverpool's ceremony was deferred until March 1978. Each event had a similar format where a government representative formally handed the keys of the unit's F350 to the local senior policeman. The dignitary would then be shown the contents of the vehicle. Smaller in size than Rescues 1 and 2, the F350s cost $16,000 each and carried over 70 items of equipment ranging from hydraulic rescue shears to rope, asbestos blankets and mittens, a chain saw, fire extinguishers, a chemical suit, breathing apparatus, ladder, stretchers, fencing posts and a small safe to store sidearms. Painted in the standardised white and yellow livery, the F350s were also fitted with a front mounted electric winch (with bull bars added later).

John Byers displaying a cutquick to dignitaries at the official commissioning ceremony for Wollongong's Police Rescue in December 1977.

One of Newcastle's F350 trucks. The first batch of F350s were each marked with the unit's name on the front of the bonnet. This was subsequently changed for later vehicles (such as this), with the word 'Police' featured prominently on the bonnet.

In selecting the equipment to be issued to the de-cents, Marrickville generally relied on tried and tested brands but they had considerable latitude to test new equipment, and a budget during this period that was sufficient to provide the necessary kit for each unit. Great care was taken in obtaining quality items that would last, and innovate where there were gaps or a lack of pre-existing equipment. The 'Finger Kit' was such an initiative a set of small tools and implements such as pliers, soap, dental mirrors, vices, a small disk cutter, files, tubs of petroleum jelly and slim strips of X-ray film. Invaluable at calls such as freeing children with their fingers stuck in taps or drains, the items (if carried) had until now been stored separately. Bruce Gane developed the idea to put them in a single purpose-designed toolmakers case. It proved a tremendous success and was promptly copied by other rescue services in NSW and Australia.

Determining the location of the first tranche of de-cents had been a relatively easy process. Newcastle, Wollongong and Goulburn were three major regional centres and Liverpool and Hornsby were suburbs located on the bush fringes of Sydney. The five locations had major

arterial roadways passing through them and large local populations that were predicted to increase markedly in the coming years. In the cases of Newcastle and Wollongong, the presence of mines, collieries and ports also increased the likelihood of industrial rescue and emergency calls.

Establishing infrastructure for the new squads proved to be a challenge. Space was allocated for equipment and vehicles wherever it could be found. Newcastle's unit initially worked from the Hamilton Police Station while at Wollongong an old oil room at the rear of the city's main police station was set aside. That room was too small to hold all the equipment so for some time, kit was stored at the homes of the rescue operators. These two larger de-cents were eventually able to move to their own buildings; Newcastle to a large but old and somewhat dishevelled shed on Kings Road, New Lambton in November 1978, and Wollongong to an old car workshop on the Princess Highway, Corrimal, in September 1980.

The official opening of the New Lambton base for Newcastle's Police Rescue. Talking is local Member of Parliament Richard Face. The unit's OIC, Peter Anforth, is on the left, with Harold Ferris (District Commander) also in dress uniform. Visible in the picture are rescue operators Allan Thompson, Brian Cherry, Robert Barrett, Jim Blackett, John Crowe and Brian McDonald.

The Hornsby and Liverpool units worked from their F350s as the police stations had virtually no office or storage space. In 1981 Hornsby relocated to the Pennant Hills Police Station, partly because

of the limited parking and storage facilities at Hornsby, but mostly because Pennant Hills was better situated to respond to the majority of emergency calls the unit received. When Hornsby had been selected it had been anticipated most road rescue calls would be on the then tollway to Newcastle (to Hornsby's north). Instead the centre of operations proved to be to the south. In 1986 the Liverpool unit was also relocated to the nearby suburb of Green Valley. The latter's police station was smaller in size than Liverpool, but with less staff it was not as cramped or crowded as the larger district headquarters, and was geographically more central for the majority of the unit's work.

Operationally, the de-cents immediately proved their worth. Newcastle was called to 22 road rescues and other incidents in just its first month of operations, and to 343 incidents in the first year.[193] Goulburn responded to 61 road rescues alone in its first 12 months.[194] Hornsby and Wollongong had similar statistics. The success was such that planning was stepped up for a second tranche of de-cents. Determining the locations relied on an assessment of the proximity of major roadways (including analysing motor vehicle accident statistics and so-called 'black spots'), the presence of cliffs and bushland, the type and amount of rescue and support work envisaged for the location and its surrounding region, the number of police officers stationed in the area, and the presence of rescue units from other agencies (especially VRA squads). The critical factor was the support or otherwise of the local district police commanders. The creation and operation of a de-cent brought training and logistics challenges for the these commanders, who had to ensure that there were a minimum of two trained rescue operators available at all times. And having staff trained, equipped and ready for calls, was not without cost.

In 1978 approval was given to establish and train a de-cent in the northern NSW town of Lismore and its first call (a road rescue) occurred on Saturday 23 September 1978. The first call for the de-cent at the central western town of Bathurst was also a road rescue, a fatality in the town of Perthville in the early evening of Thursday 2 August 1979. For both of these country de-cents, the speed in obtaining permission to establish the units and train operators, outpaced the ability of the Force to purchase and fit-out dedicated vehicles. As an interim measure both used Land Cruisers borrowed from Marrickville until their own vehicles (a Land Cruiser for Lismore

and F350 for Bathurst) were readied in 1980.[195]

In 1979 the commissioner authorised the establishment of three more de-cents in Sydney at the Blacktown, Collaroy and Maroubra stations. At the last minute the latter two were changed to Sutherland and Frenchs Forest stations. These three units became operational in 1980. Sutherland would relocate to the police station at Engadine on 1 April 1991 for similar reasons to the relocations of the Hornsby and Liverpool units it was a more central location for the calls the team regularly responded to.

On 25 November 1980 the Force officially issued a naming protocol whereby the de-cents were called 'units' (eg: Blacktown Police Rescue Unit) but Marrickville remained designated as a 'squad'. Despite the official proclamation, operators still used de-cents in conversation. Scoping had also commenced on the viability of more de-cents to be created, on the Central Coast and at Cooma, Lithgow, Nowra[196] and Penrith.[197] With the exception of Cooma, these plans were shelved because of money and in particular, the lack of it. While the Force had been allocated a sizeable amount to establish the de-cents, actual running costs were more than initially envisaged and budgeted for.

Financial concerns aside, a measure of success of the de-cent initiative can be gleaned through the fact that within a few years of commencing, the new units assumed the majority of the workload of police rescue and operational support activity in NSW. In 1976 for instance the Redfern (later to be Marrickville) squad attended 374 rescues and operational support incidents. The following year the number of incidents attended by Marrickville and the first de-cents totalled 600. In 1978 (the first full calendar year of decentralised unit operations) the total number of incidents was 833 and in 1980 the number exceeded 1000 for the first time ever (1161). In the 18-month period from January 1982 to June of 1983 though, the combined number of incidents attended skyrocketed to 5,178 – only 29 per cent of which were attended by Marrickville.[198] This dramatic growth in workload, and the increasing proportion of incidents attended by the de-cents, are made more remarkable in that the latter were part-time units whose members also performed general or highway patrol duties.

Rostering practices at the de-cents aimed to have a minimum of two operators on duty at all times and available to respond to any rescue or support call. The men worked in their standard police

uniforms but had bags containing their rescue overalls and protective equipment stowed in their police vehicles. At most units the rescue truck remained parked at the station and was driven to an emergency call by one operator (who was generally rostered on front office duties), with their partner meeting them at the scene, having driven in another police vehicle. When it was not possible to have two operators on duty, an on-call roster system determined who would take the rescue truck home.

Police pulling a young boy out of a stormwater drain while his family watch on.

One policeman who worked in three de-cents was Brian Carr. As a senior constable posted to Bulli, Carr was a foundation member of Wollongong's unit. In 1979 he was promoted to sergeant and transferred to Bathurst to become its first OIC. Carr found a different staffing dynamic in Bathurst. All of Bathurst's operators worked at the one station whereas in Wollongong the members were dispersed to multiple stations.

> 'It used to work really well [at Bathurst] and the truck hardly ever had to go home on call because they [at least two operators] were always working.'[199]

Later, Carr transferred to Newcastle where by then the unit had two F350s and a Land Cruiser, three full-time members plus a part-time cohort, and a large area of operations covering both urban and rural communities. As a consequence, both trucks and the Land Cruiser

were taken home after-hours:

> ‘We had a far better coverage and more rapid response after hours.’[200]

The Force considered its rescue network a hub-and-spokes arrangement with Marrickville being the hub. By the mid-1980s there were over 20 vehicles plus trailers distributed between Marrickville and the de-cents. Most de-cents had a single rescue truck (either an F350 or a Land Cruiser) however the workload in the larger areas such as Newcastle, Wollongong and the Blue Mountains was sufficient to justify the allocation of extra vehicles. Newcastle received a second F350 and a Land Cruiser, Wollongong was issued a Land Cruiser. The Blue Mountains’ second Land Cruiser enabled the team to be divided into two, with one group in the Upper Mountains (with the vehicle based at Katoomba) and the other in the Lower Mountains (Springwood). In addition to the extra vehicles, over time these three larger de-cents were allocated full-time personnel. Within a few years at Newcastle the OIC and two constables were allocated on a full-time basis, at Wollongong and in the Blue Mountains it was the OIC’s position only. This allowed for greater engagement between the units and other agencies and community groups.

The trajectory of calls received continued to increase as the years passed; in Financial Year 1983/1984 the de-cents attended to a total of 2,712 incidents in comparison to 1,560 by Marrickville. This meant that, on average, each de-cent attended a callout per day, on two-out-of-three days. By their nature such statistics don’t explain the complexity or length of operations; for instance search and rescue operations can take several days whereas a road rescue can be completed within an hour. Nonetheless, these statistics emphasised a high operational tempo for a network of part-time units.

In reflecting on the remarkable expansion phase of police rescue operations, the then OIC of the Disaster and Rescue Branch, Superintendent Ken Beret, commented:

> ‘I thought considering the fact that we had expanded rapidly in a short time and that we had a lot of new staff who needed to be (trained) and then used, I think we were successful.’[201]

The inside of one of Marrickville's Land Cruisers in the late 1970s / early 1980s.

ALPINE RESCUERS THE SNOWY MOUNTAINS RESCUE SQUAD

NSW's alpine region lies within the Great Dividing Range in the south-east of the state. Australia's 'Top Country' includes high plains and some of the nation's tallest mountains. Sparsely populated and renowned for sheep grazing, seasonal snowfalls and frigid winter temperatures, the region experienced huge post-war infrastructure development via the Snowy Mountains Hydro Electric Scheme. Over a 25-year period, in excess of 100,000 engineers, tradespeople and labourers built 16 dams, seven hydroelectric power stations, two new towns, scores of kilometres of roads and associated infrastructure. Even an existing town was relocated to make way for one of the dams. During the 1950s a group of immigrant workers on the scheme who were also seasoned skiers, identified several sites within the Kosciuszko National Park as having the potential for winter tourism. With government support, these entrepreneurs and others put considerable effort into building resorts and small villages in places such as Thredbo, Perisher and Guthega.

As the 1970s progressed tourism in the Snowy Mountains flourished. The increasing numbers of people flocking to the region led to the Force trialling the stationing of general duties police inside the snowfields area for the 1979 snow season. A handful of police with skiing experience volunteered for duty; they lived-and-worked from an old government accommodation block in Wilson's Valley (in between the resorts of Thredbo and Perisher). The trial proved an immediate success with the police fully occupied responding to reports of minor crimes, policing liquor laws, traffic management, and several alpine search and rescue incidents where skiers or other tourists went missing.

For these police, every search and rescue incident was a significant challenge:

> 'We basically had to learn from scratch ... because no one had the expertise in actual snow rescue at that stage. ... We didn't have any choice in the matter [to undertake rescues] because there was no-one available to help you.'[202]

Using hired or loaned equipment such as cross country skis and

skidoos, and wearing the warmest clothing they could find, the police coordinated and conducted searches using the assistance of local volunteers wherever possible. NPWS rangers were also instrumental in providing local knowledge and alpine awareness skills to the police. The police learned fast, particularly in gaining an understanding of the local terrain and how to search in blizzard conditions.

The following snow season police numbers were increased and in 1981 a second station was established, at the village resort of Thredbo. Search and rescues continued to be a part of their duties, as it was for the police stationed in the towns adjacent to the snowfields – Jindabyne, Cooma and Adaminaby. Motor vehicle crashes were common, especially at night involving intoxicated drivers speeding on narrow, winding and slippery roads. With Goulburn's de-cent several hours' drive away and no other service in the area equipped to undertake road rescues, snowfields police had to improvise, even if it meant calling on tow truck operators to use their panel beating equipment. In summer months too, police were regularly called upon to conduct or coordinate searches for missing bushwalkers, or assist on the region's lakes searching for missing fishermen. On occasion police were able to obtain the assistance of the Australian Federal Police Search and Rescue Squad to look for people lost in the mountains on the NSW/ACT border region but generally the police in the Cooma region were on their own.

In the 1960s the Police Rescue Squad occasionally visited but only to conduct cliff rescue training to selected staff of the Snowy Mountains Hydro Electric Scheme. In the early 1980s Marrickville's rescue operators also delivered snow navigation and rescue courses to snowfields police and other government officials. The first course was to have been delivered between 30 June and 4 July 1980 however it was called-off in the afternoon of 29 June because of heavy blizzards near Jindabyne. By that time the instructors from Marrickville, Constables Arthur Ackroyd, Garry Thornton and Rod Stewart, had arrived, as had rescue operators Sergeant Brian Carr and Constable Ken Ryan from Bathurst. The group were instead tasked to search for missing tourists. Using hired cross-country skis, the police spent the afternoon and early the following morning searching and eventually locating the tourists. They also stumbled across a bizarre sight of some trees on fire, in the middle of the snow. The fire was contained until firemen arrived. Afterwards the police received an impromptu

ski lesson from a local ranger, before returning home. The course was rescheduled and held in September 1980, with 40 police, rangers and soldiers trained.

After the introduction of rescue operator training in 1977 the superintendent of the Cooma district agreed for some of his police to be trained. By 1981 there were a handful of qualified operators stationed at the Jindabyne, Tumut and Adaminaby stations. These police were not formed into a rescue unit, instead small amounts of basic equipment were kept in police vehicles and used if required. Adaminaby's police car for example (a short wheelbase Land Rover) had a crowbar, some small hand tools, a half-backboard and a resuscitator. This gave the two-man station an ability to stabilise patients – vitally important in a small town over 40 minutes away from the nearest ambulance station.

After prolonged lobbying by local police and identification of sufficient funds, a Snowy Mountains Police Rescue Unit was formally established in 1984. Later to be colloquially known as the Cooma Police Rescue Squad, about half the team were stationed in Cooma but others were dotted throughout the district. A Toyota Land Cruiser (white with yellow roof) was issued. The vehicle was packed to the brim with a suite of equipment including a first aid kit, a finger kit, Stokes litter, ladder, portable lighting set, breathing apparatus and vertical rescue / roping kit. Pride of place in the vehicle was a full set of Enerpac hydraulics and a Hurst brand hydraulic rescue tool recently acquired (through donation) – the *Jaws of Life*. For local rescue operators who had been bereft of any hydraulic equipment until this time, the kit was 'absolutely vital ... [and] the one big thing we really appreciated.'[203]

A fair proportion of the team's workload was searches and rescues so the men focussed on training for that scenario, in cooperation with Cooma's small State Emergency Services (SES) unit. During one such training session however, in the late afternoon of Wednesday 31 July 1985, they were called to a train collision on tracks that ran through a private property to the north of the small town of Bredbo. There a train had collided with the property owner's station wagon. Inside the vehicle had been the owner, his wife and four children. The three children in the rear of the vehicle survived but were badly injured and trapped. For many of the police this was their first heavy rescue job. In failing light the team extricated the injured children first. They were assisted by the Cooma SES and the Australian Federal

Police's Search and Rescue Squad.

Another challenging rescue for the new team was the search for two skiers reported overdue in heavy blizzard conditions near Charlotte Pass. Police rescue operators from Adaminaby and Jindabyne joined ambulance officers from the Perisher resort to conduct the search. The police set out on skidoos and the ambulance officers drove their Hagglunds snow vehicle. During the search, conditions reached total white-out and one of the police, Senior Constable John Glossop, experienced a sudden bout of vertigo. Despite being stationary and sitting upright on his skidoo, Glossop's mind believed him to be leaning over to one side and approaching a cliff. Falling to the ground and incurring raucous laughter from his colleagues, Glossop learned first-hand the dangers of being exposed to heavy snow conditions. When a slight break in the weather occurred soon afterwards, the party resumed their search and reached Seaman's Hut, six kilometres from Charlotte Pass. Inside the stone building the rescuers found not just the two missing skiers, but 13 others who had taken shelter and were huddling for warmth, awaiting rescue.

Incidents such as this led to the development of a week-long snow survival course for all Snowy Mountains' rescue operators and other police posted to the snowfields. Prior to attending the course all participants had to prove they had a high proficiency in cross-country skiing. The course itself was focussed on snow survival with sessions on clothing, personal hygiene and equipment preparation. Training was also provided in skidoo riding, snow cave making and other sheltering techniques. With GPS units not at that time robust enough to work in snowstorms, a strong emphasis was placed on advanced map reading skills.

In summer months and for rescue operations away from the snow, the Snowy Mountains' team wore the standard white rescue overalls. When in the snow they opted for a mix of standard issue police clothing and commercially available skiwear. The Force eventually issued thickly lined versions of the organisation's leather patrol jackets, beanies and fur-lined hats, to all police stationed in alpine regions. This standard of clothing ensured the police were well dressed for the rigours of alpine weather.

The most closely scrutinised operation involving the unit in its first decade of operations began on Tuesday 6 August 1985 when Mr Stephen Crean, a Canberra public servant, set out alone from

Charlotte Pass for a cross-country ski. By the time he was noticed missing the weather had begun to deteriorate severely. A search and rescue operation was commenced by police, supported by a small number of volunteers. Worsening blizzard conditions severely hampered search efforts, the only possible clue found was a single ski track lasting only a few metres, seen on the first afternoon. Search efforts were scaled back after four days, and subsequently halted after two weeks as the man was presumed to have died. In November 1985 another search for Mr Crean's body was conducted. It involved rescue operators, volunteers and helicopters. It was unsuccessful.

Sadly it is not uncommon for some who go missing in snow conditions to never be found. A mix of severe weather, rugged and remote bushland, bushfires and hungry wild animals can make locating human remains extremely difficult. For many months police believed this was another such tragic instance. What made this case different was intense and constant media scrutiny, interest generated from the fact that the man was the son of a former federal parliamentarian and the brother of a high-profile trade unionist. Baseless media speculation bordering on conspiracy theories soon arose as to the man's actions, each piece of gossip distracted police efforts[204] from what they believed was a straight-forward case of a person not making adequate preparations before being caught in atrocious weather. Subsequent criticism of the early phases of the police search attracted much public comment although much of it was specious.

In a thoroughly bizarre twist, on Thursday 15 January 1987 the man's wallet and personal papers were posted to police in the small alpine town of Khancoban. An anonymous note accompanying the wallet explained it had been found during a bushwalk. The package was quickly tracked to the Victorian town of Shepparton where detectives quickly located a 26-year-old New Zealand itinerant fruit-picker with a penchant for collecting animal skeletons. The man had recently boasted to locals of acquiring a human skull. Police located a skull in the fruit-picker's backpack and the skull's teeth were found in a matchbox in the man's car. He initially told police he thought that by posting the wallet he had sufficiently performed his civic duty. When a contrary view was proffered by detectives, the man agreed to take them to the skeleton.[205] The fruit-picker was flown over the Charlotte Pass and Thredbo areas in a helicopter and he pointed to a spot on the ridgeline where he said he found the body a week before.

On Wednesday 21 January 1987 the entire Snowy Mountains Police Rescue Squad commenced a search, but:

> 'It became blatantly obvious in the first half day that he was leading us around in circles. ... Those of us who were experienced in this sort of search ... realised immediately there was no way in the wide world that he'd been anywhere near where he was leading us'.[206]

The fruit-picker was confronted with these suspicions. Upon considered reflection, the man admitted that he had hoped to mislead police and then later collect the bones to take them home.[207] Rescue operators were provided the correct location, near the bank of the Thredbo River and less than 200 metres from a main road. At the site they found fully clothed skeletal remains, minus a skull. Investigators subsequently formed the view that Mr Crean had become disoriented in the blizzard, ascended and then descended various ridges before wading through the flooded Thredbo River. Soon afterwards, no doubt suffering from exhaustion, disorientation and hypothermia, Mr Crean fell to the ground when he tried to climb over a fallen tree. He didn't move again.

On Thursday 4 February 1987 the fruit-picker pleaded guilty to one charge of interfering with human remains and an additional charge of causing public mischief by misleading police. Calling the man's actions 'bizarre' and 'macabre'[208] the Magistrate criticised the offender for causing additional distress to the deceased's relatives, and sentenced him to six months' imprisonment.

A SNAPSHOT OF WORK IN THE LATE 1970S AND EARLY 1980S

When he joined the Marrickville squad in July 1983 Constable Tony Malone felt ecstatic and fortunate – ecstatic that he passed his rescue operators training and fortunate that he had been allowed to join such a prestigious group, even though he didn't have a trade background.[209] To Malone the most notable things about the culture of the Rescue Squad was its determination to achieve:

> 'There was never the idea that "no we can't do this" – it was always "yes we can do this, and we're very confident we can do this", no matter what was given to us.'[210]

Another junior officer who joined during this period, Allan Woodhams, noted that the men 'weren't elitist but they were elite.'[211] The following typifies the diversity of the challenges thrown at police rescue operators in the decade after the Granville disaster, and how they responded.

At 1:40am on Monday 13 February 1978 an explosion ripped through George Street in Sydney's central business district. An improvised explosive device hidden in a garbage bin outside of the Hilton Hotel detonated when the bin's contents were emptied into a garbage truck. Two garbage collectors died instantly and Constable First Class Paul Burmistriw later died in hospital. The policeman had been part of a security detail at the hotel, which was hosting the Commonwealth Heads of Government Regional Meeting. Inside the building at the time were a number of heads of government including Australia's Prime Minister Malcolm Fraser. The devastation was horrific and six rescue operators from Marrickville rushed to set up the police forward command post then help crime scene examiners search the area for evidence, human remains and potentially other explosive devices.[212] Using a grid search pattern rescue operators found bodily remains on the roadway, shop awnings and windows. The contents of the garbage truck itself were also carefully sifted for the smallest piece of evidence. All items located were plotted on maps, photographed and carefully removed. The search took all the night and most of the following day. A leaders' retreat scheduled for two days later in the Southern Highlands town of Bowral went ahead

as planned. Significant contingency plans were urgently put into place in response to the terrorist attack including the deployment of hundreds of soldiers and over 500 NSW and Commonwealth police officers. These police were fed in the field by the Rescue Squad's canteen.

A staged photograph taken in the late 1970s and used for public relations purposes at community events and shows. Rescue operators (from left to right) are Norm Place, John Nagle and Bruce Gane.

On Friday 19 January 1979 the Department of Aviation advised

police that a light plane containing three adult males and a female teenager had gone missing during a flight from Victoria to the NSW city of Tamworth. Reports of the sound of a light plane flying near the town of Scone around 11pm the previous night gave Newcastle's Police Rescue a point in which to start their search. Early on Saturday 20 January 1979 an RAAF helicopter sighted the crashed plane in remote bushland. It was turned upside down at the base of a gum tree, on a steep mountainside. While the three male occupants had died in the crash, miraculously the teenager survived and she was winched from the scene by the helicopter crew. Unfortunately the rescue effort was marred when the winch line was caught in heavy foliage, causing the stretcher to spin and further injure the teenager. The helicopter was damaged but able to land safely at the police forward command post.

After the girl was taken to hospital, Sergeant Peter Anforth and Senior Constable Allan Thompson accessed the site and with considerable care, entered the crashed plane. The two began to place the first body into a body bag when Thompson lost his footing in the slippery conditions. Both he and the victim started to slide down the cliff but Anforth was able to grab both long enough to enable Thompson to regain his footing. When the body was fully placed into the body bag, Anforth radioed for an electricity department helicopter. On board was another constable who had an improvised rope net that had been previously prepared by Anforth and his team. Hovering over the crashed plane, with one of end of the rope attached to the helicopter's cargo hook, the constable lowered the net. Anforth and Thompson secured the body in the net before it was flown (hanging about 50 metres below the helicopter) to the forward command post. There the victim was lowered to the ground and taken to the mortuary by ambulance. This process was repeated to retrieve the other two bodies and the large amount of luggage that had been stowed in the plane.

The Sydney Harbour Bridge is both an icon and, until 1992, the only thoroughfare directly connecting North Sydney to the Central Business District. With its summit over 130 metres above sea level, sadly the bridge has also been the scene of hundreds of suicides and suicide attempts. Police (especially rescue operators) are routinely called to suicide related incidents at the bridge, or receive reports of people acting suspiciously or unlawfully climbing the bridge. On the evening of Wednesday 28 March 1979 Arthur Ackroyd, Bruce Gane

and Dick Lamb responded to reports of a man sitting on a box girder underneath the bridge's main warning light, perched 80 metres above the roadway. Because of the man's position the rescue operators could not attach their safety harnesses to the girders as they slowly inched their way along the metal beam in gusty winds. Lamb led negotiations with the man, who was suffering from depression.

Dick Lamb and an unknown rescue operator pushing a male over a fence, to waiting police and emergency personnel, on the Sydney Harbour Bridge. The male had threatened to jump. The exact date of this incident is unknown but it is sometime in the early 1970s.

After 20 minutes of stilted conversation, the man suddenly became agitated and moved to jump. Lamb was now close enough to instinctively reach out and grab him under his armpits and around the chest. Amidst a flurry of punches and kicks he received in return, Lamb grimly held onto a steel railing. As Ackroyd moved in to help he was forcefully kicked in the legs and almost fell; it was only when

Gane also reached the group that the three police were able to finally subdue the man by tying him to the girder. He subsequently calmed down sufficiently to be escorted down the bridge, where he was taken by ambulance to hospital for psychiatric evaluation.[213] Meanwhile the three police were dispatched to a road rescue call in western Sydney. For their actions on the bridge Lamb and Ackroyd were each awarded the Australian Bravery Medal. Gane was awarded the Australian Commendation for Brave Conduct.[214]

The following year, on Saturday 23 February 1980, Gane roped down the side of the Royal Prince Alfred Hospital in Camperdown to effect the rescue of an elderly woman threatening to jump off a balcony if her family did not take her home. The woman was distracted by other police long enough for Gane to place himself on a ledge, sneak up and then grab the woman. There was no struggle and the woman was taken to another hospital.

Three months later, on Thursday 8 May 1980, John Nagle made news headlines for vaulting through an opened 13-storey hotel window to grab hold of a man who was threatening to jump. The intoxicated individual had positioned himself on the concrete awning underneath the window of the Park Street hotel, and played to a crowd of over 1000 people who gathered below. Several people (including a priest) unsuccessfully attempted to negotiate with the man. After an hour of failed discussions, Nagle swooped out of the open window when the man briefly leant backwards towards the building's wall. Attached to a safety rope and finding himself upside down, Nagle wrestled with the man until Constable Norm Place jumped from another window onto the ledge and secured both men.

John Nagle reaching out of the window, tenuously holding onto the man, while Norm Place (obscured) grapples with the man and moves him towards the window.

About 10:15pm on Saturday 9 June 1979 smoke was detected in a wooden building housing Luna Park's ghost train ride, near the northern footings of the Sydney Harbour Bridge. The fire quickly spread and consumed the building. Most patrons managed to escape but tragically seven perished – a father, his two sons and three other young boys. As firemen battled the intense flames in one part of the building, in the other rescue operators from Marrickville began a search for the victims.[215] Six bodies were eventually located but they were entrapped in the pile of twisted metal and charred wooden debris. Floodlights were set up by the Rescue Squad before they and crime scenes police moved to recover the victims. After the bodies were examined and photographed in-situ, rescue operators used oxy-acetylene torches to cut up the debris before it was removed by cranes and trucks. By late morning on the Sunday the remains of the victims were retrieved. Four days later the families of the victims publicly thanked the Rescue Squad and other police for their efforts and support.[216]

Chaos erupted in a large vehicle workshop in the Sydney suburb

of Taren Point on Wednesday 17 October 1979. An elevated steel platform storing hundreds of vehicle tyres and batteries collapsed onto workers below. In the commotion three employees were trapped among 50 tonnes of steel tubes and tyres, with batteries caught near the top of the pile leaking their acidic contents below. Seven rescue operators from Marrickville attended the scene where they, supported by general duties police, scrambled into the large and fragile pile of metal and rubber. With the risk of further collapse very real, and amidst the constant sounds of groaning metal and acid fumes, the rescue operators used a range of hydraulic tools and wooden blocks, to stabilise the mess and release the employees one-by-one. Throughout this, ambulance officers remained with the victims. Afterwards, a general duties policeman wrote a report recommending an award to the rescue operators – a suggestion politely rejected by the Rescue Squad's OIC Sergeant First Class John Carter:

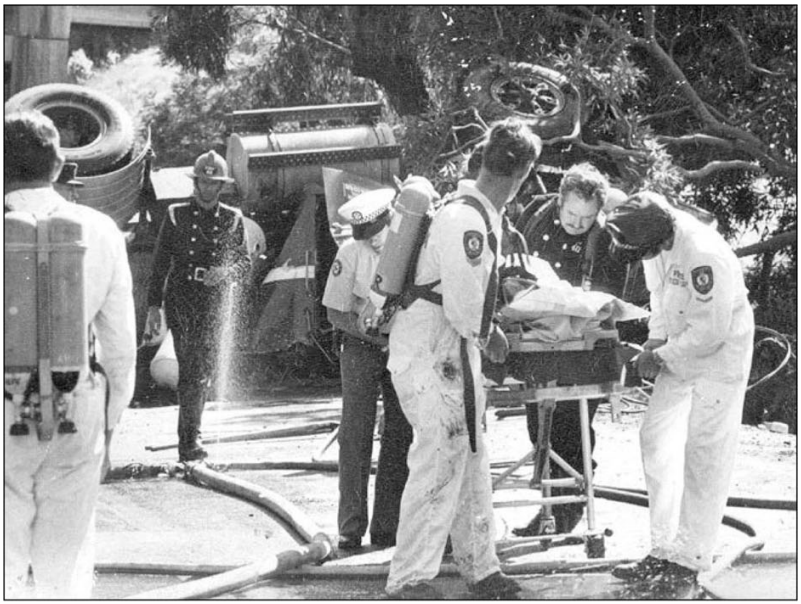
> 'Whilst it is gratifying that the work of the members of the Rescue Squad has been praised ... I feel that no further recognition of this incident is justified. ... Their keenness and lack of regard for their safety is also highly commendable but this is considered to be "in the line of duty" and is expected from the hand picked men who make up the squad.'[217]

A rescue call with a dangerous twist was received at the Marrickville base just after midnight on Saturday 7 June 1980. A tow truck driver rang to report a crashed vehicle in the nearby suburb of Enmore. Constable First Class Rod Stewart and Constable Garry Thornton responded in Rescue 2. Upon arrival the crashed car was unoccupied but covered in live electricity wires. After removing the wires to a safe place the rescue operators checked inside the car and discovered an abandoned rifle. A witness indicated the driver had fled into a nearby churchyard. With suspicions aroused, the two policemen, along with Constable Terry McGlynn from Newtown Police Station, entered the churchyard and using their torches, soon located a man sitting next to a fence. The man said nothing as police approached however as they were about to pick him up, his demeanour suddenly changed. A sawn-off shotgun was produced from behind the offender's back; he shouted to the police that he would shoot them. Thornton and McGlynn immediately grabbed the shotgun and began to wrestle the man for it, while Stewart climbed the fence and then jumped onto the offender's back. The force of the impact floored the

man, who was promptly disarmed, arrested and charged. Checks revealed the offender to be a career criminal who had recently migrated to Australia.

On the bright morning of Sunday 12 April 1981 a semi-trailer carrying 20 tonnes of hydrochloric acid collided head on with two cars at a sharp bend on the Princess Highway at Helensburgh, between Sydney and Wollongong. The force of the collision ground the first car 'into an unrecognisable mass of twisted steel against a tree, and ... [barrelled] the second off the road into the bush.'[218] The semi-trailer driver and the elderly two occupants of the first car were killed instantly. The elderly driver of the other vehicle barely survived the impact of the collision, but he and the surrounding area became engulfed in a poisonous cloud of acid fumes, emanating from the hundreds of litres of liquid spilling from the damaged tanker.

Police rescue operators from Wollongong were the first rescue unit to arrive. Wearing breathing apparatus the men used their hydraulic equipment to free the trapped driver. After bundling the man into an ambulance, the operators focussed on recovering the bodies of the victims and searching nearby houses to ensure everyone had evacuated. In this the team was supported by their Marrickville colleagues (who brought extra air cylinders) and ambulance rescue operators. Meanwhile, firemen used a neutralising agent to counter the effects of the thousands of litres of acid that were spilling into bushland and towards Sydney's water catchment area. The entire operation lasted for 16 hours, during which time police were advised that the man died from his injuries in the ambulance before it could reach the hospital.



The Helensburgh crash on 12 April 1981. Above: Emergency personnel, some wearing breathing apparatus, removing the driver from the scene. Below: In the aftermath of the crash rescue crews begin to pack up. Police rescue operators are cleaning their sets of breathing apparatus.

In the early evening of Tuesday 4 August 1981 two-and-a-half-year-old William Farr was frolicking with his mother on his parent's

farm near Ourimbah, on the NSW Central Coast. William ran and jumped on pile of dirt that was covering a recently dug dry well, 23 centimetres in diameter and over 30 metres deep. The dirt gave way and the boy fell five metres down the hole before becoming stuck with one arm wedged above his body. With his frantic parents unable to reach their son, a family friend (an off-duty police officer) phoned for help. Within minutes a multi-agency operation was launched with the Hornsby and Marrickville police squads joining the Central Coast VRA, the SES, bushfire brigades and council workers. By chance a similar situation had occurred some days earlier in Italy and publicity surrounding that event (in which the boy had died) encouraged discussion among the Marrickville's rescue operators of how such an operation could be performed in Australia. One of those who had closely studied the Italian incident, Arthur Ackroyd, was immediately flown to the site in PolAir 3 while Bill Fahey and others drove to the scene in Rescue 1.

Local rescuers were able to use a pole to place a rope around William's wrist in a hope they could prevent him from sliding further down the shaft. A further fall risked suffocation from a lack of fresh air, and this had been how the boy in Italy had died. Ackroyd quickly assessed the situation and decided on a course of action. Time was of the essence as the experienced rescue operator believed the major lesson from Italy was there had been 'too much stuffing around and arguing over who would do it.'[219]

As William's father continued to talk and sing to his son to keep him awake, an air hose was placed into the shaft and fresh air pumped in. Meanwhile Ackroyd initiated the digging of an adjacent shaft. The objective was to dig to a level lower than William, then across so as rescuers could approach and grab him from underneath. A borer machine was initially used but it had to be taken away due to its vibrations impacting on the shaft with William in it. Hand tools (shovels and picks) were the only alternative but because the second shaft was only wide enough to fit one person, the handles of the tools had to be shortened using Rescue 1's cutting and grinding equipment.

Significantly, five off-duty coal miners from a colliery at Cooranbong volunteered to assist. Their expertise in digging in confined spaces considerably hastened the rescue effort. Taking 10-minute turns at the digging, rescuers were eventually able to connect the two shafts. A crowbar was then hammered into place across the shaft, on top of which an inflatable life jacket was activated. This was

a preventative measure in case William slipped further. It then took another 30 minutes to safely widen the section of the shaft around William. Eventually, after a total of six hours, William was released from his predicament and reunited with his family. By miracle the boy was only slightly injured and was discharged from hospital during the night. Immediately after the rescue both shafts were filled in and the following day Bill Fahey publicly praised the efforts of all involved.[220] William's rescue received national and international media coverage: the squad received wide praise including a congratulatory telegram from Deputy Prime Minister Doug Anthony. Proving that it's impossible to keep everyone happy, the squad did receive some criticism. A senior council official complained that the police had damaged council property – the picks and shovels. Fahey's comment, given in retirement, was fairly candid:

> 'The way he went on you'd swear blind it was the Harbour Bridge I tore down.'[221]

On Monday 15 November 1982 four-year-old Tammie Thelan was at her father's butchery in the far south coast town of Cobargo. While putting meat into a century old mincing machine, Tammie somehow got her left hand caught and it quickly became badly trapped. Local emergency services could not devise a way to safely extract the mangled hand. Fortunately, instead of undertaking an amputation, they rang the Police Rescue Squad. Options were discussed and when it was agreed that the tactics were beyond the capability of local rescuers, a plan was devised whereby the mincer was dismantled at its base. Tammie (with the mincer) and her parents were then flown to Sydney in an air ambulance. Upon arrival she was rushed to the Prince of Wales Children's Hospital in Randwick. Waiting for her on the lawns of the hospital were medical staff, the media, Bill Fahey, Bruce Gane and Senior Constable John Lowe. By agreement with physicians, the rescue operators had a plan to remove the casing in a fashion that gave medical staff the best opportunity to save Tammie's hand. The police operation had to occur outside the building because the smoke and sparks that would emanate from the tools would set off the building's fire alarms.

Tammie, with her parents by her side, was laid down as comfortable as possible on a mattress and a tarpaulin was erected so she couldn't see what the squad was about to do. After examining the mincer closely, talking to the girl, ensuring medical staff were ready

and that everyone had hearing protection on, the two constables took turns in cutting along the length of the mincer's outer casing using a cutquick tool. It took almost an hour and involved the most careful use of a large industrial cutting implement, hosed down regularly to minimise the heat being generated against the young girl's limb. Gane had undertaken several similar rescues previously however this was the most difficult because the mincer had two casings, the outer one made of bronze and the inner of steel. Through most of the cutting Tammie was brave and didn't cry, even though there were sparks and water flying about:

> 'I could feel the pain she was going through myself ... she was in good spirits – not crying at all. She proved to be a brave little girl as she fought back tears to give me a few smiles.'[222]

When the young girl became distressed towards the end, she was anaesthetised. By this stage the rescuers had pried apart the outer casing, and had cut the inner casing to with a millimetre or so of her skin. The final phase involved using a chisel and hammer along the cut, a task equally as delicate but which required the use of force. Once the casing separated and the girl's limb was separated from the mincemeat that she had been inserting into the machine, medical staff raced Tammie inside the hospital for what would be over seven hours of microsurgery. The following day Fahey visited the girl and her family to say hello and gift a very large stuffed toy dog. The previous evening the police had gone to a pub after work and told fellow patrons about Tammie. The stuffed toy was one of several prizes in the pub's raffle and many of the patrons banded together to buy tickets, one of which won the prize. Apart from losing the tip to one of her fingers, Tammie was subsequently able to regain mobility in her hand.

Barry Fahey oversighting John Lowe who is cutting the mincer casing off Tammie Thelan's arm. Bruce Gane (head obscured by the tarp) is also looking-on closely, to assist Lowe.

A week after Tammie's rescue, the Marrickville squad took a lead role in solving a 13-year-old mystery in western NSW. On Thursday 31 July 1969 a Cessna light plane crashed into Lake Burrendong, a large and deep manmade lake near Wellington in central west NSW.

On board the aircraft had been the male pilot and three female passengers. As he flew over the lake at an unsafe height, the pilot lost his sense of perspective and crashed the plane into the water. A major search on the day recovered the bodies of the pilot and one passenger however the position of the sunken plane was not mapped before a major storm muddied the waters that evening. Subsequent dragging and diving operations conducted on several occasions failed to locate the plane and the other two victims in what is a very deep body of water.

In mid-1982 Dick Lamb and the squad's then OIC, Sergeant First Class Don Coates, were called to the edge of a cliff adjacent the Barrenjoey Lighthouse at Palm Beach, Sydney. There they recovered a vehicle that had become stuck and almost driven off the cliff's side. The vehicle's somewhat embarrassed driver was a surveyor in the Marine Survey Branch of the Department of Public Works. Afterwards, over a coffee, the surveyor explained he was part of a team using 'side scan' (or 'tow fish') sonar to map the coastline. This conversation fascinated Coates, a former member of the Dubbo VRA who had been involved in many unsuccessful searches for the missing Burrendong plane. The sergeant asked whether the sonar could be attached to a small boat and used on a lake. When the surveyor responded in the positive, it gave Coates an idea.

Coates organised with a number of agencies for a search exercise called *Operation Sonar* to be conducted from Tuesday 23 to Friday 25 November 1982. The sergeant led the operation; also present were Dick Lamb and Rod Stewart from the Rescue Squad, local police, police divers, rangers, surveyors and members of the VRA (including Ray Tyson), SES and the Wireless Institute Citizens Emergency Network. The search involved a small powerboat towing a sonar unit as the device mapped the portion of the lake underneath it. After several passes of a section of the lake, the sonar was removed and its data analysed by the surveyors. On the second day of the search the plane's engine and propeller were located by the sonar and then recovered by divers. Another series of passes over that area of the lake located what divers found to be the plane's fuselage.[223] Brought to the surface the following day, the fuselage revealed a mostly well preserved yet calcified body of one of the passengers. Although they couldn't locate the final victim, the operation was considered a success and a tribute to the squad's innovative use of technology.

In the late afternoon of Saturday 15 January 1983 a young

woman fell 70 metres down a cliff at Honeymoon Lookout near Katoomba. Still barely alive, the woman miraculously landed on a narrow ledge about 200 metres above the valley floor. She had been, in effect, caught by the trunk of a fallen (dead) tree, which now rested above her. About an hour later, and in strong wind conditions Constable First Class Garry Thornton who had recently transferred from Marrickville to Katoomba Police Station, was winched down to the woman by a PolAir helicopter. Because of weight restrictions and wind gusts, Thornton was unable to carry any harnesses or rescue equipment other than some bandages in the pockets of his white overalls. The protruding dead tree prevented the policeman being landed next to the woman, he instead was placed several metres away and had to wrap his feet around a smallish sapling growing at right angles to the cliff face. After he separated himself from the helicopter's cable, Thornton shimmied along the narrow ledge to the woman, where he provided rudimentary first aid to her extensive head, shoulder and arm injuries.

When Thornton radioed he was ready for collection, PolAir returned in strongly gusting winds that constantly threatened to smash the helicopter against the cliff face. On several occasions the chopper had to abort, fly away and then return. On what the pilot had decided would be his last attempt, the winds died sufficiently long enough to start lowering a Stokes litter on the winch line. Ominously for Thornton the litter became entangled by one of its straps on the aircraft's skid. If it couldn't be freed then the helicopter would have to leave. The helicopter's observer, Constable Christine Simpson, immediately placed herself in danger by moving (without a harness and exposed to the rotor's downwash) along the skid and kicked the litter clear. As with the insertion though, because of the proximity of the dead tree, the litter could not be lowered directly to the woman's location. Without any rope securing him to safety, Thornton ripped a branch off the nearby sapling then reached out with it to catch the litter and then pull it to him. Once the constable secured the victim into the litter, she was winched up and PolAir flew to a nearby school oval and a waiting ambulance.

In deteriorating weather Thornton waited a seeming eternity for his recovery. PolAir returned and the constable had to again shimmy along the sapling, pushing himself away from the cliff face to grab hold of the cable and harness. For his actions that day Thornton was awarded the Star of Courage – Australia's highest civilian award for

bravery. He also received a number of departmental awards. The PolAir crew, pilot Lionel Houston and observer Christine Simpson, were also honoured for their actions with Australian Government Commendations for Brave Conduct.

Road rescues (and body recoveries) were a substantial part of the workload for all police rescue units in the 1980s. At this crash rescue operators are working out how to retrieve a victim from a badly smashed and overturned car.

As a somewhat chilling aftermath to the rescue, when a Government House official visited the site as part of the process to consider bravery nominations, it was discovered that the dead tree that had broken the woman's fall, and which had been precariously perched above her and Thornton, had disappeared – fallen to the valley floor. Humorously, in a commemorative magazine on the 20th Anniversary of the Blue Mountains squad in 1988, it was noted by then OIC of the squad:

> 'This official made some remarks questioning the sanity and the parentage of all three involved'.[224]

Just prior to 9am on Sunday 24 June 1984 a 14-year-old boy on a school camp fell down into a rock crevice about 15 kilometres from Lithgow. The first rescue service to arrive was Lithgow VRA, later

joined by police rescue operators from the Blue Mountains and Bathurst. The youth was wedged sideways in a 22-centimetre gap between the rocks – too narrow for most rescuers to fit into. Members of the VRA's Cave Rescue Squad joined the rescue effort (two were even flown from Sydney to the site in a PolAir helicopter). With the cavers in the lead, rescue operators sanded smooth the rock surrounding the boy, and then applied large amounts of petroleum jelly to the rock to make it easier to pull the boy to safety. The eight-hour operation was successful and the boy was able to walk to the waiting ambulance. On a winter's day there was the real risk of the boy falling victim to hypothermia. Mentally exhausted, for a while the boy cried uncontrollably. Towards the end though:

> 'He'd got his fighting spirit back. Once he started swearing at us, we knew he was all right.'[225]

Earlier that year central Sydney came to a standstill on the afternoon of Tuesday 31 January when a bank robbery turned into a siege. Around 3pm an experienced robber brandishing a rifle successfully stole $10,000 from one inner city bank. Instead of fleeing, the man immediately held up the neighbouring bank. Police arriving at the first bank soon saw the gunman and a siege ensured with many hostages taken. Scores more police arrived, including heavily armed members of the Special Weapons and Operations Squad (SWOS).[226] Rescue Squad constables Norm Place and Tony Malone assembled barricades to keep people away. With the barricades set up, the two returned to their Land Cruiser in a side street to await further tasking. To the two's amazement and horror, around 5pm the gunman suddenly appeared from a building near them, surrounded by five bank staff who were forced to be human shields. After radioing their observations to VKG, Place and Malone scurried in different directions, warning pedestrians and ushering workers to vacate the area or risk either being shot at or taken hostage. Meanwhile the huddled group slowly walked along the street until they stumbled across a small Datsun sedan that had been abandoned by its driver but with keys left in the ignition. The hostages and hostage taker got into the car and drove off, followed by a hastily formed convoy of police vehicles, including the rescue Land Cruiser.

For almost two hours the convoy meandered its way from central Sydney east to Bondi, back through the city and then north over the Sydney Harbour Bridge. At one point a hostage was freed from the

car so as he could use a public phone to ring the gunman's girlfriend, who later got into the car at the Northern Beaches suburb of Queenscliff. With the chase broadcast live on radio and television, people flocked to the route to abuse the gunman and to wave and cheer at the hostages and pursuing police. It was a surreal situation, made more dangerous by the offender's worsening mood when he heard a commercial radio announcer describe him as a lunatic.

Police sensed an opportunity to resolve the situation when the convoy approached the Spit Bridge. They ordered the bridge to be raised at the last minute. The resulting traffic jam stopped the convoy and enabled police negotiators to plead with the increasingly agitated gunman who was seated in the middle of the front of the Datsun. At the rear of the convoy, atop the road leading down to the bridge, and blocking approaching traffic, was a handful of police including Malone and Place, and the driver of an unmarked police vehicle carrying spare SWOS weapons.

With dusk approaching, an urgent radio message was transmitted on the police radio, calling on police to stop the Datsun. The erratic and angry gunman had ordered his hostage driver to turn around and drive up on the now empty side of the road leading from the bridge. The rescue and SWOS vehicles were driven onto the wrong side of the road and formed a roadblock. The Datsun came to a sudden halt and what happened next, occurred in only a matter of seconds.

A pursuing SWOS vehicle stopped immediately behind the Datsun, its three occupants – Detective Sergeant John Nagle and Detective Senior Constables Stephen Packer and Steven Canellis – jumped out and approached. Nagle, who had some years earlier left Police Rescue to become a detective, stood with his rifle pointed at the Datsun's rear window. Packer approached the front passenger door with his revolver raised, Canellis moved to the front driver's door with a shotgun and loudly calling on the gunman to surrender. At the same time Malone raced to the rear passenger's side door of the Datsun, opened it and grabbed one of the hostages. So intense was the situation, and so focussed was Malone on getting the hostages out, that he didn't think to pull out his revolver.

The gunman decided to kill a policeman – he pointed his rifle at Canellis and shot him at point blank range. The bullet entered the detective's face at the bridge of his nose, between his eyes. Upon seeing their teammate fall to the ground, Nagle and Packer both opened fire and killed the gunman. Amidst screaming and shouting,

the gunfire and shattering glass, the hostages were grabbed from the car, one-by-one. First aid was immediately applied to the injured detective and two injured hostages who received relatively superficial wounds from broken glass. In saving Canellis, police were assisted by paramedics and a passing physician who (by chance) specialised in gunshot trauma. Miraculously, the detective survived as the bullet missed vital organs, travelled down his neck and lodged under his collarbone.

Police and others at the scene of the gunfight near the Spit Bridge, at dusk. Rescue operators (from left to right) are Dave Longworth and Tony Malone (faces obscured), Mark Powderly, Peter Robb and Norm Place. Photo: NewsPix.

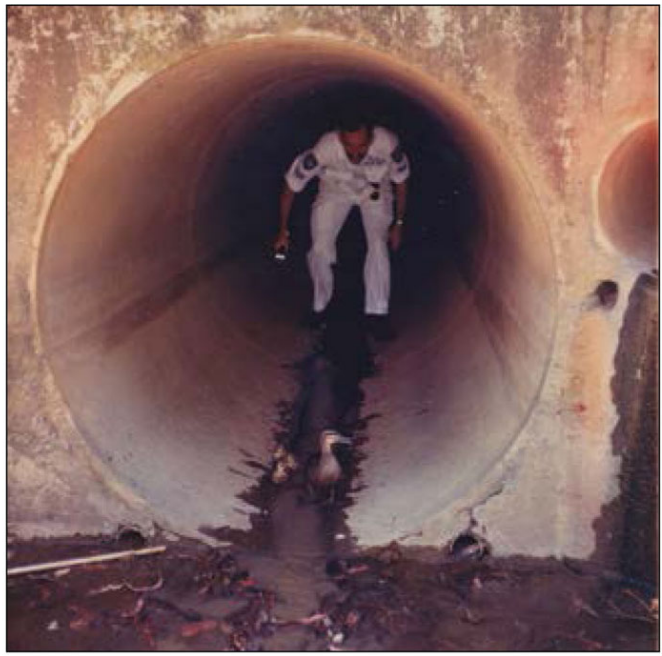
Fortunately, not all rescues attended by police rescue operators involve carnage and tragedy. Some are inherently comic in nature although not necessarily obvious to those involved at the time. Just after midnight on Monday 1 April 1985 Constable First Class Dave Longworth at Hornsby Police Station received a phone call from a nurse from the local hospital, requesting police help in freeing a man's appendage that had been caught in the zipper of his trousers. Noting the date, Longworth thought the call an April Fools' prank and hung up. It took a second call to establish it was a legitimate request. The policeman radioed for Hornsby's rescue operators Constable First Class Bob Hansen and Constable Bill Langdon:

'I think VKG copied my transmission because all I could hear

were howls of laughter when he tried to say something. It apparently had made their night.'[227]

A surgical theatre was prepared with the patient receiving a local anaesthetic in preparation of the procedure that was to come. Using the small cutting tool from the finger kit, Hansen and Langdon set about delicately cutting the stitching on each side of the zipper, freeing it from the cloth. One of the nurses kept applying cold water from a syringe because of the significant amount of localised heat generated from the cutting disk. The operation was completed in around 40 minutes, with the patient able to leave hospital safe but feeling quite tender and embarrassed, if not overexposed.

Police rescue operators have also been involved in countless rescues of animals. While many calls have been serious and involved animals suffering great pain, police have also attended their fair share of cats stuck in tree calls, dogs trapped under houses, or where snakes have refused to leave from inside houses. Indeed it was an animal rescue that was the only time Ray Tyson was injured on-duty. When trying to rescue a cockatoo that had been trapped in a tree for three days, the bird bit the sergeant on the finger and drew blood. The cockatoo was promptly taken into custody and placed in the police truck. An urgent road rescue call delayed the return on the pet to its owner, along with a stern caution.[228]



Senior Constable Kevin Banister from Pennant Hills shepherding a mother duck and three ducklings from a stormwater drain at Cherrybrook. The ducks had been stuck underground in the maze-like drain network for almost a day; their distressed noises attracted concerned residents who contacted police. With the assistance of Water Board employees and residents aboveground who triangulated the approximate location of the animals, Bannister crouched through almost 500 metres of drains to find them. After being guided out, the animals were taken to safety at a nearby lake.

An inherently comical animal rescue call occurred around 5pm on Monday 21 December 1981 where the Hornsby and Marrickville teams attended a road rescue with a difference in Parramatta. Tara, a 15-year-old circus elephant was one of four on the back of a low loader truck when she fell off and hit her head on the roadway. Amidst blocked peak-hour traffic, police could do relatively little apart from attempt to keep the pachyderm calm until the arrival of a vet from Taronga Zoo, flown to the site by PolAir. Apart from being dazed and suffering cuts to the ear, Tara was given a clear bill of health. Standing next to the vet, Gary Raymond took a professional interest in how to provide a medical assessment of and treatment to such a large animal. At one stage the vet threw a large amount of a white anti-biotic powder over the pachyderm's ear. Raymond was too engrossed in the animal to notice that the vet jumped backwards; instead the rescue operator copped the full brunt of a cloud of

powder that erupted when the elephant shook its now stinging head.

Newcastle's Brian Carr holding a puppy dog he rescued from underneath a house. Police Rescue have long undertaken animal rescues, and for many years were the only service in the Sydney Metropolitan Area that attended such calls for help.

Another animal rescue occurred on Tuesday 1 November 1983 when Blue Mountains operators were redirected from training to rescue four goats stuck on a small ledge near Mount Victoria. Garry Thornton, who had earlier in the year undertaken the Honeymoon Lookout rescue, was lowered to the ledge. With considerable difficulty he was able to catch each goat and, one at a time, tie the animal's legs and then place it into a makeshift harness. One-by-one each goat was hauled to the top by Thornton's colleagues. Each time this occurred though, the goat in the harness would panic and empty its bladder. With no place to hide on the ledge, Thornton was saturated by the urine. To add insult to injury, the now very smelly constable was forced by his colleagues to ride back to the police station in the rear of the paddy wagon, alone.

ENGAGING WITH OTHER GROUPS

Senior police expected their rescue units to play a leadership role in the coordination and development of rescue capability in their local regions, with a special (but not exclusive) emphasis on supporting VRA units where possible. This matched a growing understanding within the Force that police had a leadership role in the coordination of disaster and emergency response planning throughout the state. In the Sydney Metropolitan Area the volunteer units to Sydney's west, especially the SES at Hawkesbury, were given considerable amounts of training assistance. For the de-cents, the degree of interaction with other units depended in large part on the proximity of the units, the type of work the volunteer units undertook and the willingness of those units to work with the police.

Despite not being the first emergency rescue unit to operate in Newcastle, the 10-man police team quickly assumed a leadership role for over 15 volunteer rescue groups in the wider Hunter region. The size of the police district surrounding Newcastle was huge, stretching over 200 kilometres from the Central Coast in the south to Taree in the north, and almost 200 kilometres from Newcastle in the east to Murrurundi in the west. No one single rescue team could provide a comprehensive coverage of an area so large. Cooperation was essential.

The squad's first OIC, Peter Anforth, worked tirelessly with the various rescue units and private industry bodies to form an arrangement that subsequently became known as the Volunteer Rescue Training Programme. A training roster was established where regional teams would travel to the police base at New Lambton to undergo training and familiarisation of equipment, techniques and practices. While relationships were always close with the VRA, the squad also engaged with SES and ambulance teams, and local NSW Fire Brigades crews when they too began to expand their role. The police also reached out to the private rescue teams that operated at coalmines and large industrial facilities, and who possessed highly technical and specialised equipment beyond the financial reach of the police and other emergency services. Agreements were quickly reached whereby this equipment could be shared in times of emergency. The police also reached out to local institutions such as

the University of Newcastle, where legal and disaster management related lectures were given to the Faculty of Medicine and the Regional School of Nursing.

Very quickly the police found themselves being notified by the volunteer units each time the latter were called out. This enabled the police (with their heavier equipment) to start responding as well. If upon arrival at the call the volunteer unit felt it was able to deal with the matter alone, the police truck would be returned to base. When a rescue helicopter service began operations in the Hunter region, a paramedic would also be flown to the emergencies where there were serious injuries, thus ensuring the regional volunteer and ambulance teams had a quality of on-scene clinical care approaching that available in Sydney.

Neville Graham (front left) from Lismore's Police Rescue along with other police, VRA and ambulance personnel, carrying a badly injured motorist who had crashed his vehicle near the remote Minyon Falls. In rural areas, where there are less numbers of emergency personnel, interagency cooperation is absolutely vital.

The relationship between Goulburn Police Rescue and surrounding volunteer squads was less structured than in Newcastle, but still very effective. Hundreds of kilometres separated the police

from several volunteer squads in the region, yet they provided assistance either through joint responses or providing advice over the telephone. This was greatly appreciated, particularly by the smaller volunteer units that had minimal amounts of equipment and attended only a few calls a year:

> 'We'd get calls at all times of the night. Often they would be ringing from the nearest farmhouse to the crash, asking for advice on how to do something. Other times we would get a call after they had returned to their shed, telling us what they had done or wanting to know how to service a piece of equipment after it had been used.'[229]

In the case of the Berrima District VRA, located about 70 kilometres northeast of Goulburn on the main highway between Sydney, Melbourne and Canberra, the level of police assistance was more substantial. For many years, and with the approval of the Force, one or two local police officers were qualified rescue operators and notionally attached to Goulburn, however they turned out with the VRA (albeit in police overalls).

The relationships built between police and other agencies in rural areas have withstood the test of time. On Sunday 16 May 2010 a truck carrying cattle rolled over, the vehicle's passenger and many cattle died. Pictured are Phil Downes from Goulburn's Police Rescue and Tony Greenwood from the VRA. Firefighters and ambulance officers were also in attendance.

Wollongong police similarly engaged with other rescue units that were already operating in the region in 1977, ambulance and volunteer. They too had a huge area of responsibility, notionally stretching over 400 kilometres to the Victorian border. The unit's first

OIC, Ted Doherty, noted:

> ‘I think we got off on the right foot when we first formed. We didn’t go and say “well right we’re going to do this”, we involved everybody else.’[230]

Doherty, who had previously been a rescue operator in the Blue Mountains, encouraged the other units to undertake joint training days. Most accepted, which helped to break down barriers, build up skills and get an appreciation for the capacity and capabilities of the various groups (ambulance, VRA, SES, Mines Rescue and for a time, the National Safety Council of Australia).[231] In a spirit of cooperation ambulance officers arranged for the police to receive additional first aid training and the two groups informally agreed on a division of road rescue responsibility – the police took the lead response in Wollongong and to the city’s north while the ambulance team took the lead in the south around Nowra. For police support work in the broader region, such as bush search and rescues, the police relied heavily on assistance from the VRA, SES and NPWS.

WOMEN JOIN THE SQUAD

The Force employed its first female police officer in 1915 however for decades the number of women allowed to join were set by a quota – three per-cent of the total staffing strength of the Force.[232] The duties of what were formally titled Women Police were limited to dealing with juveniles, wayward youths and female prisoners. Administratively, women were treated differently to their male colleagues; they were paid at lower rates and until the 1960s, had to resign when they married. As late as December 1978 there were just 143 policewomen in the Force, compared to almost 9000 men.[233] While at various stages police command tentatively considered expanding the roles of policewomen, they seldom acted without being prompted through legal action on the part of aggrieved individuals.

In January 1969 Ray Tyson submitted a report in response to a direction by the commissioner's office for specialist unit OICs to nominate the types of duties policewomen could undertake. Unsurprisingly given social attitudes of the time, the sergeant suggested the women could best be used to staff the canteen during emergencies: preparing and serving food, maintaining the vehicle, providing security and undertaking associated clerical work. Also, policewomen could sort out the 'jealousies' and 'difficulties' that arose from time to time among volunteers who staffed other canteens at major emergency events. If these duties were undertaken, it would free the policemen in the squad to undertake 'heavier' duties.[234] The proposal was not acted upon.

After a series of anti-discrimination and associated legal cases brought on by policewomen who challenged the status quo, their pay and conditions of service were eventually brought into line with their male colleagues. It took another legal case for the quota system to be abolished and in 1980 the way was finally opened for women to join the Force in large numbers. This was followed by a series of breakthrough moments when policewomen joined specialist units for the first time. In 1980 Constable Christine Simpson was the first woman to join PolAir and Constable Jennifer Sheehy the first to join the Highway Patrol. In 1982 Constable Janet McGillivray became the first female mounted police officer, the following year Constable Val

Bryant qualified as the first female police motorcyclist. In 1986 Constable Lisa Ford became the first woman assigned to the Sydney Water Police, two years earlier she had also been the first to qualify as a police diver. It was also in 1984 that the Rescue Squad trained its first female rescue operator.

Constable Sally Verhage joined the Force in 1981 at the age of 19, having worked for almost three years as a clerk at Redfern Magistrates Court. First posted to general duties at Regent Street Police Station in central Sydney and then to Maroubra, Verhage attended several crashes and witnessed the Rescue Squad in action:

> 'I remember going to accidents and people were trapped and there was nothing I could do to help them. It was just horrible really. You would just have to sit with them and keep them calm until [the] Rescue Squad arrived; so then I thought, "well hang on a minute, there's something I can do about this." So I put an application in to join.'[235]

When she wrote her application Verhage refused to type the letter W under her signature block (indicating she was a policewoman). This was contrary to departmental policy but she didn't want to attract special attention on the grounds of her gender. Verhage needn't have worried as the instructors and the recently appointed OIC, Inspector Ken Holmes, were prepared to give her the opportunity to be assessed on her merits. They knew the Rescue Squad needed to be opened to women and welcomed any applicant who was genuinely interested.

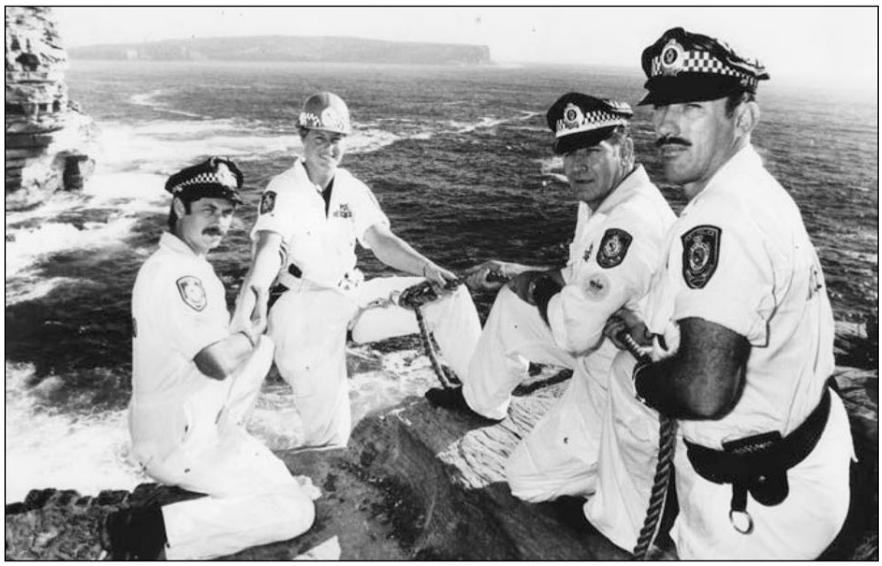
Verhage was the only policewoman in the nine students that undertook training in June and July of 1984. The course's syllabus and testing standards were not amended for Verhage, the fitness requirements in particular were geared towards the unavoidable reality that rescue operators had to be sufficiently fit to lift and operate heavy equipment, ascend and descend cliffs and other drops, and carry victims moderate distances. Standing over 183 centimetres tall, the 22-year-old had few difficulties in undertaking the physical aspects of the course[236] although roping hand-over-hand at The Gap was somewhat terrifying for someone who had never done it before. Perhaps the toughest challenge was learning how to quickly assemble and disassemble complex hydraulic equipment, as she had no prior experience working with industrial tools. Verhage felt she was treated in the same way as the males on the course; the instructors were impressed by her determination and capabilities. Notwithstanding

her lack of a trade background, Verhage's hard work and persistence paid off and she successfully completed training. After a period back at Maroubra station and performing rescue duties at Marrickville on an occasional basis, a position became vacant and Verhage joined the squad full-time in 1985.[237]

The second female rescue operator, and the first to join a de-cent, was Sonia Gash from Goulburn Police Station. Having joined the police in 1985 and stationed to Goulburn, Gash quickly developed a keenness to become a rescue operator. The junior officer's application attracted some derision from several colleagues in Goulburn, but it did not deter her. By the time of her training course in May 1985 Gash was also in a relationship with a Goulburn rescue operator, so she had a good idea what to expect. After successfully completing training the policewoman moved from being the partner of a rescue operator, to working alongside him (and other operators) at many incidents during a rescue career of several years.

Another woman eager to become a rescue operator was Constable Simone Beaupark, who like Gash, had joined the Force in 1985. After recruit training Beaupark was sent to general duties at Sutherland where she worked with rescue operators on a daily basis, witnessing firsthand how they were suddenly called away to rescue and support operations:

> 'I attended many person's trapped accidents where my colleague that I was working with was a rescue operator. I would watch in awe as he would transform from a general duties cop into a rescue operator. He wasn't the cop giving out a ticket for negligent driving, he was part of a specialised team helping someone survive. I was really inspired by that and wanted to be part of the squad.'[238][239][240]



Public relations photographs marking Sally Verhage's successful completion of the basic rescue operators course and of her joining the Police Rescue Squad. Above: At Marrickville base, others are (left to right): Paul Magurren, John Lowe, Tony Malone, Ron McGowan and (OIC) Ken Holmes. Below: Near The Gap, others are (left to right): Norm Place, Ken Holmes and Rick Meredith.

With a slight build and confident personality, Beaupark initially received a degree of resistance from some male colleagues, however this dissipated when she successfully completed the rescue operators course and finished close to the top of her class. Beaupark didn't find

the course easy though; weeks of physical training gave her the strength to lift and use the heavy equipment however the hardest part of the course was learning and applying the knowledge while confronting stressful environments for the first time (such as cliff work and claustrophobic training simulations). Nevertheless, she returned to Sutherland eager to start her rescue career and quickly found she loved the work.

By the early 1990s most squads had at least one female operator in their ranks, some a few more. These new operators were accepted without much fuss, in spite of the broader gender issues and tensions that characterised this era of policing – a male dominated organisational culture coming to terms with the increasing prominence of female participation. The degree of acceptance within the rescue cohort was partly because of the determination and actions of the women themselves and partly because the men knew that the high standards of the training course were uncompromisingly applied to all trainees – male and female alike. Successfully completing the course attested to an operator's level of skill and gave a degree of credibility that was universally accepted. This is not to say there weren't individual personality conflicts between some male and female members, or between males and males for that matter. What can be written is that, on the whole, female rescue operators didn't face the degree of entrenched sexist culture that afflicted some other units in the Force.

Not totally by coincidence, the topic of women joining the Rescue Squad was the main plot of a 1989 pilot episode of a television action/ drama series titled *Police Rescue*. In a fictionalised Police Rescue Squad, Constable Georgia Rattray was the first woman to join what was a slightly chauvinist group of (personally flawed) policemen who undertook dramatic rescues in photogenic environments. The television series made for gripping viewing in a period where Australian-made action shows were rare. The series of 61 episodes ran for five seasons from 1991 to 1996, with a motion picture also released in 1994. Amidst the character driven storylines were depictions of a diverse array of rescue and recovery operations, some scenarios drawn from real life incidents. The real Rescue Squad assisted the production company by training several lead actors in basic equipment handling procedures and roping techniques, loaning some uniforms and equipment as props, and providing technical advice on the scripts during pre-production.

A rescue near Hornsby involving Kevin Banister and Gaby Gaughan from Pennant Hills. Two boys playing at a construction site became trapped in a large mound of clay, with only one being able to free himself. Gaughan took the lead in digging out the other boy.

Cindy Milton and Shannon Smith.

As is often the case when making television or movies that portray action and drama, there were creative differences between filmmakers and technical advisors when reconciling the artistic desire to depict rescue action in an episodic televisual format, against real world techniques and procedures. On more than one occasion the police and producers agreed to disagree on how to show police and rescue work, and in at least one case this had a humorous result. In an early episode the show's lead actor, Gary Sweet, was shown being on duty during a summer heat wave with the top half of his work overalls undone and tied around his waist. The scene of the bare-chested 'policeman' driving a 'police' truck was filmed at a real service station with cameras set at a distance. A passer-by subsequently made a complaint to police about one of their officers being undressed.

A publicity photo for the television series *Police Rescue* with actors Gary Sweet and Russell Crowe

It was not uncommon during this period for the show's main actors and rescue operators to attend functions together, especially charity events such as one on Wednesday 4 November 1992. The event was to raise publicity for a children's charity and involved the actor Sweet along with Senior Constable Neville Greatorex and Constable Mick Smith abseiling down the side of a large building in North Sydney. At the bottom, fans and news crews caused minor traffic obstructions when they mobbed Sweet. Afterwards a local senior police officer grumbled about the squad allowing the traffic obstruction to occur, a somewhat unfair criticism the rescue operators felt, but part-and-parcel of the amount of charity work the squad voluntarily undertook.

A scene from an episode of *Police Rescue* where the characters Brian, Mickey and Georgia attend a truck crash and become caught up in a major under-cover police operation. Actors from left to right are Jeremy Callaghan, Gary Sweet and Sonia Todd.

Public demonstrations and charity work are a part of the Rescue Squad's heritage, with requests routinely made by community groups and schools for police to provide displays of their roping prowess, road rescue capabilities, vehicles and equipment. One such event was the official opening of the Sydney Entertainment Centre on Sunday 1 May 1983 where police abseiled inside the building, from the ceiling to the stage. In fact rescue operators came to know the concert and indoor sport venue very well between 1983 and when the building was demolished in 2015. Most basic rescue training courses conducted during this period undertook part of their rope training inside the centre, roping was also undertaken on a voluntary basis for charity events at the venue. Most memorable for several rescue operators was a major ecumenical musical fundraiser event involving 3000 school children on Sunday 27 May 1990 – several operators including future Inspector Garry Smith dressed as angels with wings and tinsel halos, abseiled from the ceiling during festivities.

Max Sladden and Neville Greatorex assisting a charity raising funds for research into the causes of sudden infant death syndrome. The two are guiding the placement of a large red plastic dome on the side of a building in William Street, Sydney.

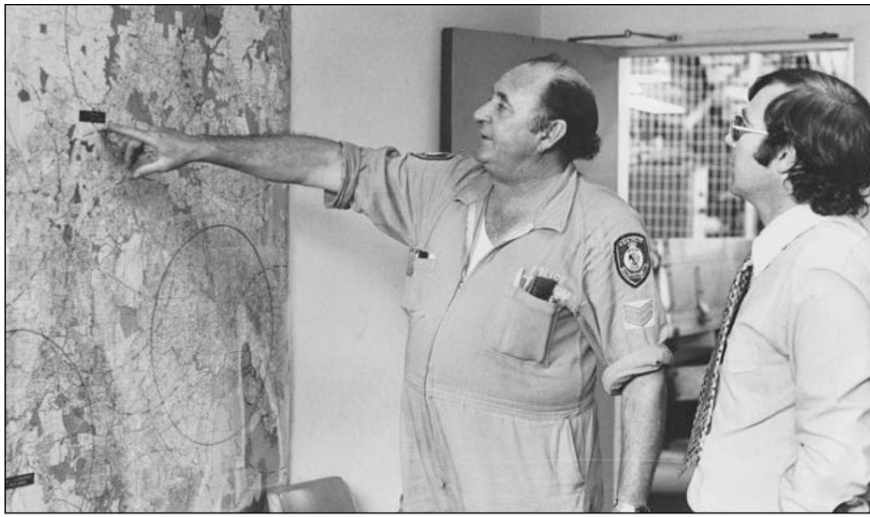
Caption: Neville Greatorex (left) and Alan Wade (with Rescue 2 in the background) at a publicity event in December 1992 where money was donated to the Prince of Wales Children's Hospital.

GENERATIONAL CHANGE AT MARRICKVILLE

On 20 July 1985 Sergeant Second Class Bill Fahey retired from the Force having reached the mandatory retirement age of 60. Even though he didn't join the Cliff Rescue Squad until a decade after it was established, Fahey came to be regarded as one of the unit's founding fathers, alongside Harry Ware and Ray Tyson. They were the men who did more than most to shape the development of the unit in its first forty years of existence. Physically, Fahey was a bear of a man, a roughened diamond who was demonstrably passionate about his calling. Imbued with a vivid zeal in the same vein as Ware, Fahey lived for the squad. His strengths were his compassion, friendship, being hands-on and innovative, as well as his ability to deliver common sense results.

To junior members Fahey was a wise teacher who listened to arguments and lines of logic, and if he disagreed, carefully explained to his interlocutor why they were wrong. When he told stories about rescues and operations past, people invariably found themselves riveted due to his knowledge and oratory skills. Fahey was nonetheless dogged in his beliefs and not afraid to argue a case. On more than one occasion he would provide frank advise to his superiors and bureaucrats. He in particular railed against what he regarded as false economies, for example purchasing cheaper equipment if it would wear out sooner than slightly more expensive but higher quality kit. Possessing keen foresight, Fahey was one of the driving forces behind the decentralisation model of rescue operations and had an important mentoring role to an entire generation of rescue operators in the police and VRA.

In addition to numerous departmental awards, Fahey received three official government honours. The first was the awarding of the Queens Police Medal in 1976 and then the Order of Australia Medal in January 1985. Both were awarded for his service in the Rescue Squad. He was also awarded a Granville Medallion by the NSW Government. After retirement Bill married and remained in Sydney for a decade before moving to Queensland and into a house he won in a lottery. He and his wife spent his last years there before he died at the age of 81 on Friday 3 November 2006.



Bill Fahey at the Marrickville base in 1978 or 1979.

The 1980s saw more staffing change than just Bill Fahey's retirement and the entry of women into the teams. In each unit there was a healthy rate of staff turnover, with existing members either being promoted, transferring to other duties, retiring or resigning from the Force, with new operators taking their place. The transition was particularly marked at Marrickville where most of the old hands (those who joined in the early 1970s) moved on. For some, like Bill Fahey and Arthur Ackroyd, they had no choice. Whereas Fahey had to retire because of his age, Ackroyd was retired on medical grounds in 1984 due to a mishap at a body recovery near The Gap the previous year. He had been badly injured while standing on a ladder stretcher being hoisted up the cliff. A wind gust threw Ackroyd and the stretcher (with the victim's body on it) against a rocky outcrop. The force of the collision was such that it cracked both the stretcher and Ackroyd's spine. Subsequent surgery was unable to fully restore the policeman's back and he took a pension when faced with the reality that he would not be allowed to return to operational rescue duties.

For others such as Dick Lamb, Bruce Gane, Gary Raymond and John Nagle, their transfers were because each had reached a stage where they either felt no longer challenged by the work or sought promotion. Each had attended hundreds of rescues and body recovery incidents, and hundreds more operational support cases. While they passionately believed in the importance of their work, each were

naturally inquisitive souls who enjoyed being presented with new challenges. Lamb was promoted to a general duties sergeant position at Liverpool in 1983 (where he was also a member of that station's decent), returned to Marrickville in 1985 before transferring to PolAir in 1987. He was further promoted and transferred to the State Emergency Management Section of the State Operations Support Group. The group was established in 1987 and included disparate units including the old Disaster & Rescue Branch, Police Rescue Squad, PolAir, and the Physical Evidence, Fingerprints and Criminal Histories Units. Bruce Gane similarly moved to the State Emergency Management Section to focus on disaster planning, before being seconded to a special tasking in 1988 with a recently retired Australian Federal Police Commissioner. John Nagle transferred to detective duties while Gary Raymond also became a detective after a brief period of general and rescue duties at Blacktown Police Station.

One of the motivating factors for Raymond leaving Marrickville in early 1984 was the realisation it was time to make way for a new generation. This was prompted in large part by a conversation he had with a young constable who had approached him about applying to join. When told there were no vacancies the constable became distressed for he held a childhood dream to be in the Rescue Squad. By this time Raymond had already been questioning his future and the need to try something different; the episode merely jolted him into action. And this type of conversation was not unusual, for by the mid-to-late 1980s there were many recruits joining the Force with a strong (even sole) desire to be rescue operators. Additionally, there were numerous applications from existing police who witnessed the work of rescue operators first-hand and were inspired to join. While there may have been a touch of romanticism about the work in the minds of many prospective members, it was a fact within the Force and the community that the Police Rescue Squad was one of the state's most elite units.

The vehicles allocated to Newcastle's Police Rescue in the late 1980s; two Hinos and a Toyota Land Cruiser.

Along with new faces were new vehicles and equipment. From late 1985 the fleet of F350s were phased out and replaced by six-cylinder Hino FD Econo Diesel trucks. The Fords had served admirably, were robust and able to take a tremendous pounding, but were regarded as beasts to drive (particularly when driving in anything other than a straight line) and kept every driver on their toes. Since 1977 several of the vehicles had been prematurely retired and replaced with other F350s because of damage or over-use. Goulburn alone went through five F350 cab/chassis in 10 years, although the rear equipment compartment was transferred to each new vehicle. When the maintenance costs of the F350s started to increase and Ford announced intentions to stop selling the vehicles in Australia, the Force's fleet managers encouraged a consideration of alternative vehicles. The Hinos possessed sufficient torque for prompt (but not ultra-rapid) responses to emergencies, had larger rear equipment compartments than the F350s, and (unlike Rescues 1 and 2) were not classified as heavy vehicles so did not require heavy vehicle licences to drive.[241]

The original Rescue 1 and Rescue 2 trucks were both sold to the VRA in the late 1970s and replaced by more contemporary diesel automatic versions. The rear sections of the two new trucks were broadly similar in appearance and layout to the originals, but their interiors were tweaked to take into account lessons learned from a

decade of operational use. This included side door access to cabins that had smaller windows, as they were increasingly used as change rooms at rescue scenes. Long wheelbase Land Cruisers continued to be preferred for the light rescue fleet, the vehicles performed very well albeit some being overloaded with the amount of equipment they carried. For all these new vehicles the paint scheme was white, with blue lettering for the police signs, and small colour decals of the Nemesis badge on the side of the vehicles. This change from the previous white and yellow colour scheme was in keeping with the Force's new preference for marked vehicles to be white.

During the decade there were many technological developments in the design of rescue equipment. The police were able to acquire some of the most cutting-edge kit available in Australia while at the same time phase out obsolete or even dangerous items of equipment. The most notable instance of the latter was the disposal of the asbestos blankets and mittens that had first been issued for fire and heat situations in the 1950s.

The types of new equipment acquired ranged across the spectrum. The Hurst brand heavy-duty motorised hydraulic equipment that had been acquired to augment the Enerpac hand-operated equipment, were replaced with Lukas brand sets that had higher performance and weight tolerance levels but were lighter and more compact to carry. All sets of negative pressure self-contained breathing apparatus were phased out and replaced with positive pressure sets.[242] Industrial strength airbags, able to be inserted flat under a heavy load and then inflated with pressurised air to lift that load, were also acquired for all de-cents.

Newcastle's Police Rescue members display their HAZMAT suits in the early 1980s. For two decades both the Police Rescue Squad and the NSW Fire Brigades responded to all HAZMAT incidents. In the 1980s and 1990s the Brigades became sufficiently resourced to take on the lead combat role for HAZMAT incidents throughout NSW.

New nylon and synthetic rope and climbing systems were tested through wary eyes, in large part because of the squad's strong historical links with and corporate fondness for the virtues of manila rope. The improving quality and practicality of lighter weight synthetic ropes, and associated devices to assist operators in ascending and descending drops, in time led to the replacement of kilometres of manila stocks. Enough was retained for a large reel to be placed on each vehicle to enable hand-over-hand hauling operations and to operate the aging Cliff Rescue Machines at Marrickville. Other cliff rescue apparatus (technically called edge management devices) were acquired in the late 1980s (and early 1990s). The Larkin Frame proved to be the main alternative to the Cliff Rescue Machine. Designed by former VRA member Ken Larkin, the frame is a 40-kilogram aluminium swivelling device in the shape

of an uneven tetrahedron. It can be operated by as few as four operators whereas the much larger and heavier machine required a team of at least 10. The Larkin Frame does have some limitations and was always regarded by police as one (extremely) useful option in certain vertical rescue situations.[243]

Top: Sutherland's Police Rescue members training for the first time with their Larkin Frame in 1989 at Audley. Bottom: Larkin Frame training at Bondi in 2008. Note the changes in workplace health and safety practices in regards to requirements for the wearing of helmets, harnesses and ropes when at the cliff's edge.

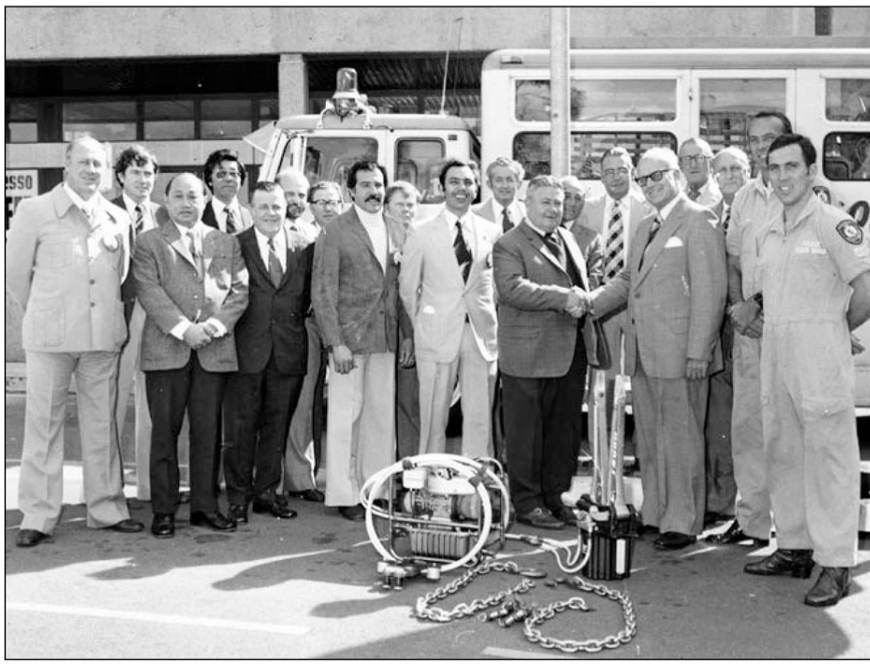
Another innovation, introduced in 1985, was a vehicle dedicated to providing high-powered lighting at crime and rescue scenes. While all rescue vehicles had been issued lighting sets, their quality and power varied. Trailers with floodlights that could be put atop a mast

and powered by a small generator, had been first introduced in the 1970s. Built from scrap items on an idea by Arthur Ackroyd, the trailers were a marked improvement on the police having to manually hold up floodlights for detectives and crime scenes police. The trailers were finicky though in that two rescue operators were required to set up the masts and their small generators had to be constantly monitored to ensure they did not run out of petrol.

For months in the 1980s Senior Constable Alan Wade proposed having one truck dedicated to providing the brightest lighting possible (the type then used by television and film crews), with the lights capable of being raised high in the air on pneumatic booms. As the lights, generators and fuel sources would be in the one vehicle, and the booms able to be operated from a central control panel, only a single rescue member would be required to operate the truck. Wade eventually convinced the squad's leadership and sufficient money was allocated to purchase a Hino with a bespoke rear body that included two booms, a noise dampened compartment for the generator, and a fuel line that enabled the vehicle's fuel tank to feed the generator.[244] Given the call sign of 'Rescue 9' the truck was an immediate success; it and its successor vehicles remain one of the most heavily used police assets in the Sydney Metropolitan Area.

A constant challenge for Marrickville and the de-cents during this era was the level of funding provided by the Force. Year after year in the 1980s the allocated budgets were tight; rescue operators experienced varying frustrations with having what they believed to be insufficient amounts of kit. A wish list was maintained of equipment that was sought, for those instances where additional monies could occasionally be harvested from other areas of departmental budgets. This dearth of funds encouraged the teams, including Marrickville, to seek (or at least accept) donations from local community and service groups. Arguably against departmental policy, accepting donations was often the only way that de-cents in particular could source badly needed equipment. In the Blue Mountains for instance, rescue operators wanted adjustable harnesses to wear when they were undertaking helicopter winching operations. For its part the Force had sanctioned the issuing of one harness (non-adjustable) per rescue vehicle. Non-adjustable harnesses posed obvious challenges for rescue operators who didn't have the body shape the harness had been designed for. Specially designed adjustable harnesses were available for purchase at around $1000

each – a considerable sum at a time where the average wage of a constable was less than $20,000 per year. With the support of a community group, sufficient funds were raised to purchase two adjustable harnesses, which came to be used by multiple operators over many, many years.



Police accepting a Hurst Jaws of Life from a community service group in 1978. John Nagle is in overalls (front right) with Peter Robb next to him. Ken Baret, the then head of the Disaster & Rescue Branch, is shaking hands (right). Within hours the kit was used at a serious motor vehicle crash.

THE RESCUE WAR

As the 1980s progressed the story of rescue in NSW unfortunately became associated with inter-service tensions and at times animosity between the five main emergency organisations that provided general (land) rescue services in the state.[245] Tensions had begun in the mid-1970s and were inflamed by a variety of factors including the politicised nature of the fire service's expansion into general rescue, a lack of firm strategic direction by successive governments on rescue service delivery, an unwillingness on the part of the main agencies (police included) to meaningfully resolve differences, and occasional arguments between some personnel at rescue scenes. The failure to swiftly address the issues when they arose led to a so-called rescue war, a complex public policy problem that tested the resolve of all concerned.

Inter-service tension and rivalries emerged in the wake of efforts by some firemen to obtain training and equipment to undertake road rescues, a quest that became an issue of serious industrial contention within the NSW Fire Brigades.[246] The antagonists were the Board of Fire Commissioners (the organisation's governing body), the Fire Brigades Employees Union (FBEU) and small groups of firemen based in Sydney's west and north, who were regularly attending road rescue calls for which they were neither equipped nor trained. Often the firemen had to wait for an hour or more until a police or ambulance rescue crew arrived at the scene.

Requests by these firemen for equipment were rejected out-ofhand by the Board, a body consisting of representatives from the institutions that funded firefighting operations (insurance companies, local councils and the state government). For decades the Board had been inherently conservative in nature and resisted expanding the role of firemen beyond the Brigades' legislated responsibilities to provide firefighting services in urban areas. The dissatisfied firemen turned to the FBEU for support but the union was initially disinterested. This changed markedly after the issue became embroiled in an (unsuccessful) effort within the FBEU to oust a senior union official.[247] That official subsequently became an ardent advocate for firemen to play the leading role in rescue.

The FBEU had a well-deserved reputation for left-wing

militancy[248] and was dogmatic in its dealings with others. The Board for its part was constantly dismissive of and antagonistic towards the FBEU, at one stage in the 1970s arguing for the union's deregistration. By the mid-1970s the issue of training, equipping and providing legal coverage to firemen for rescue incidents came to hold a prominent and emotive place in an existential conflict between the Board and FBEU. Drawing on experiences such as the Brigades' limited capabilities at Granville, the FBEU utilised its political contacts within the union movement to convince the state (Labor) government to announce in May 1977 the establishment of a committee of inquiry into all facets of Fire Brigades operations (including rescue).[249]

Police argued against a greater role by the Brigades; in its official submission the Force highlighted the historic reluctance by the Board to undertake non-fire rescues, emphasised the efficiency of police rescue operators, and reinforced the fact that police did not take industrial action with the same frequency as firemen. The Force argued that overall it would be a duplication of money, training and resources if the Brigades were to enlarge its general rescue capacity.[250] The committee rejected this view and argued the Fire Brigades should become the primary rescue agency in NSW for road, industrial, rail and domestic rescues, and disaster situations.[251] Subsequent lobbying by the FBEU (including threatened industrial action) influenced the government to pass legislation to empower and legally protect firemen undertaking rescues in good faith. Now supportive of an involvement in rescue, the Board[252] initiated a phased equipping and training regime for the stated purposes of both enhancing responses to fire situations and to support police who had primary responsibility for the control and coordination of rescue services.[253] By 1984 all 300-plus NSW Fire Brigades stations possessed varying amounts of rescue equipment and all operational firemen had received at least rudimentary levels of rescue training.

As the equipping process progressed the FBEU increasingly complained both publicly and privately about what they believed was police hesitance to call firemen to rescues, and that the VRA should give way to the 'professional' Fire Brigades crews.[254] Inter-agency cooperation in rural areas was generally excellent (as many people tended to be members of multiple volunteer agencies), however there were some locations where friction emerged, generally when Fire Brigades or SES units established or expanded rescue capabilities in

towns that already had VRA units.

Police, ambulance officers and firemen extricating a person from a serious vehicle accident involving large concrete pipes. Another patient lies in the truck's cab.

Concurrent to these developments there was, for a time, a souring in relations between the Police Rescue Squad and some ambulance personnel. The establishment of the de-cents raised the ire of some ambulance rescue operators who resented the presence of the new and generally better-equipped police, while they themselves struggled to keep their vehicles operational, staffed and their equipment up-to-date.[255] The police knew these concerns and efforts were made to regularly engage, train and cooperate with their ambulance colleagues. Underlying tensions reached a flashpoint in the immediate aftermath of a road rescue in the western Sydney suburb of Revesby in the early evening of Saturday 12 April 1980. At the scene a junior ambulance rescue operator was physically pulled out of a crashed car by a rescue sergeant. The policeman feared the ambulance operator was about to directly jeopardise the safety of the

trapped victim through the incorrect application of hydraulic equipment, and had ignored several police warnings about the danger.[256] A stop work meeting of ambulance officers on Wednesday 16 April 1980 voted to place a ban on calling the Police Rescue Squad to rescue incidents. This ban was promptly lifted after the police, fire and ambulance unions agreed through mediation to restate acknowledgement that all three services each had a role to play in rescues. The ambulance ban had followed an earlier unrelated industrial ban by the FBEU on training police recruits in basic fire awareness principles, because of that union's concerns about police not involving firemen more frequently at rescue incidents.

Previously, a proposal by the Police Rescue Squad to obtain paramedic training for some of its members was so strongly opposed by ambulance officers that it was shelved. Former ambulance officers Gary Raymond and Bruce Gane argued that having people with advanced medical skills at the forefront of dangerous and remote rescues was extremely advantageous for patient care. Stabilising patients medically at the incident gave rescue operators more time in which to safely effect rescues. At this time the clinical skills of most ambulance officers were rudimentary and only one ambulance service in NSW was contemplating introducing an advanced life support (paramedic) qualified cadre of staff. Nevertheless when it was discovered in 1975 by the ambulance union that Raymond and Gane would undergo paramedic training at St Vincent's Hospital in Sydney, they lodged strong protests with the hospital and police command. The proposal was reluctantly abandoned. The following year the first group of 16 ambulance paramedics were trained in Sydney but it would not be until 1986 that the Ambulance Service of New South Wales established the Special Casualty Access Team – a small group of paramedics trained for remote, hazardous and otherwise inaccessible locations. Paramedics from this unit would come to work regularly with police rescue operators throughout NSW, especially in the Blue Mountains.[257]

At the operational level, the tensions, personality conflicts and even physical confrontations of the rescue war were not as commonplace as later claimed and publicised in the press. At most rescue scenes personnel from the various agencies worked together professionally. But there were some incidents of disagreements, a few of which were heated, particularly involving police and firemen. Friction emanated partly from differing rescue techniques used by the

groups,[258] partly because of the varying quality of rescue training, and partly because stress levels at rescues can be such that people act and react tersely towards others.

As years passed the tensions became increasingly linked to dogmatic arguments over which agency was better placed to undertake the rescues. The Fire Brigades argued they had personnel deployed at more locations than other agencies and that rapid response times to calls were of critical importance in effecting rescues. Ambulance advocates argued they had a better understanding of patient care. For their part, the police believed they were among the best trained personnel in Australia whereas the ambulance service was generally understaffed and sometimes inadequately equipped, and most firemen during this period did not have either the training, experience or the confidence, to effect complex rescues. The police also argued that they performed a range of rescue and police support operations that other agencies were not prepared to undertake. On that basis it was logical for police to continue providing rescue services, as the skills needed for all these tasks were complementary.

Efforts by the agencies to address compounding tensions included the establishment in December 1980 of a Rescue Coordination Centre (RCC) at VKG. In a first for any Australian jurisdiction, telephone conference lines were set up to enable direct communications between the RCC, the ambulance and fire communication centres, and the Police Rescue Squad. This enabled timely notifications of rescue incidents between the agencies. The process involved the police's Senior Operations Officer (SOO) advising all parties of the location of a rescue call; each service would indicate their nearest rescue unit and the SOO would authorise the callout of the closest one, irrespective of the service. The RCC coordinated 1,593 such rescues in its first full calendar year of operation[259] and infrastructure was subsequently expanded to areas surrounding Sydney. Despite this, complaints continued over perceived delays in interagency notifications or of the police not responding the closest fire or ambulance to a rescue call, instead favouring the Police Rescue Squad. Periodic claims were also made that each service engaged in a bidding process whereby they provided misleading estimations of response times.

Another initiative, undertaken at the direction of State Cabinet in March 1980, was the formation of the Rescue and Emergency Service

Coordination Committee (RESCC), a part-time board of senior officers from the three services, with secretarial support. The RESCC was tasked to identify the roles of each service and then develop plans for coordinated rescue control systems in Sydney. This included addressing complaints raised by any of the services. With Cabinet's support, in 1983 the RESCC was enlarged to include senior representatives from the VRA, SES and the NSW Bushfire Brigades (later to be called the Rural Fire Service), with regional sub-committees subsequently established to focus on local arrangements. Like the RCC, RESCC relied on the goodwill of participating agencies, which had its limits as demonstrated by fruitless efforts to produce a common training manual in 1985. Widespread criticism that the RESCC framework exacerbated problems 'by inertia and apathy'[260] were not without merit – its impotency partly the result of most committee members not having personal expertise in rescue operations, but mostly because the committee lacked coercive authority to develop and enforce interagency rescue policies.

Throughout this period Police Rescue Squad members felt they were at times stuck in the middle of a larger political game, even though (or perhaps in part because) they were technically more proficient and often had superior equipment in comparison to other services. On several occasions in the 1970s and 1980s the police attended large building fires and used their breathing apparatus whereas firemen did not have any of their own. Two prominent examples were the blaze at Warringah Mall on Tuesday 20 November 1973 where two women died, and at the Rembrandt Apartments Hostel fire at Kings Cross on Tuesday 25 August 1981 where nine people died. At both scenes the police were asked by some firemen to enter buildings with their breathing apparatus to assist in search and rescue operations in the thick, acrid smoke. Once inside, the police were abused and angrily ordered out by other firemen.[261] The Brigades rejected police claims that the actions were orchestrated, but the FBEU did cite these examples as reasons why the Brigades should obtain more breathing apparatus. The instances of such behaviour declined only after sufficient numbers of breathing apparatus were purchased for all firemen (now called firefighters) in the mid-1980s.[262]

While the police attempted to raise any concerns with the Brigades when an issue arose, often the first that individual police rescue operators knew that firefighters had concerns about them, was

when virulent criticism was published or broadcast in the media from anonymous sources or FBEU officials, or when a complaint was raised by a parliamentarian with a known link to fire officials. Upon investigation the complaints against the Police Rescue Squad invariably proved to be without substance. But police felt the damage had been done in the public and policy-makers' minds.

Continuing tension and ongoing campaigning by the FBEU for the Brigades to become the primary rescue agency in NSW[263] led to the (Labor) Government announcing in March 1988 a comprehensive review of the state's rescue policy. Major-General Ron Grey, a former soldier and recently retired Commissioner of the Australian Federal Police, was appointed to conduct the review with the assistance of a small support team of technical advisors including Bruce Gane, Brian Carr and Alan Wade (all veteran rescue operators). Grey and his team travelled NSW and other parts of Australia to research, consult and take submissions from interested parties. On 28 June 1988 Grey's final 224-page report was presented to the newly elected (Liberal) government.

Police Rescue Squad members and firemen working together to recover bodies from the Rembrandt Apartments. During firefighting operations the previous evening there had been arguments amongst police and firemen, symptomatic of the growing tensions between the services over who conducted rescues in NSW.

Grey argued for the overhaul of rescue policy, the state's emergency management system and associated organisational structures, with a view to enhancing the quality of rescue and disaster planning services, and to reduce duplication of resources and incidents of over-response. He urged reinforcing the police's lawful obligation to direct and coordinate rescue responses of all

organisations throughout NSW.[264] Grey canvassed the idea of creating a new independent rescue service to replace all others but ultimately dismissed it for financial reasons. Instead, he argued, police should have the prime responsibility for rescue, with a series of accredited units from other services (especially volunteer units outside of metropolitan areas) in locations where the police did not have a rescue unit of their own. Grey also recommended replacing the RESCC with a legislated body to control and coordinate the provision of both rescue services and to oversight the planning and organising for disasters throughout NSW. This State Rescue and Emergency Services Board (SRESB) would consist of senior officials from the various services and be directly accountable for its decisions to the government.[265]

In April 1989 Cabinet accepted many (but not all) of Grey's recommendations. It agreed for instance that an SRESB was essential, that police were responsible for coordinating rescues and that a power to declare a state of emergency should exist in crisis events. However Cabinet followed the recommendation of the Minister for Police and Emergency Services to not vest responsibility for rescues throughout the state solely to the police or any single service, but to allocate responsibility locally on a case-by-case basis through an enforceable accreditation system administered by the SRESB. The Minister subsequently appointed Grey to lead an implementation group to prepare draft legislation and develop a list for its consideration as to which units should be accredited. The *State Emergency and Rescue Management Bill* was debated and passed with bipartisan support in parliament in November and December 1989, and assented to by the Governor on Thursday 14 December 1989. The inaugural meeting of the SRESB to determine rescue accreditation was planned for February 1990.

When in mid-1989 the government publicly announced its intended way forward the FBEU expressed its outrage. The union, along with senior firefighters had told Grey they would strongly contest any recommendation that denied them primary rescue responsibility throughout the state.[266] The FBEU escalated its public campaign for rescue supremacy[267] and for the police's role in rescue to be limited to cliff rescues and rescue incidents on the Sydney Harbour Bridge.[268] The FBEU publicly criticised Grey, repeated previous episodes of contention and issued 'battle kits' to FBEU members – briefing packs to help members lobby community groups

and local politicians. A key part of the campaign was distributing thousands of copies of a red coloured pamphlet titled *Government Plan Could Kill Your Family,* in which the FBEU pleaded among other things to restrict police rescue operations. The pamphlet (and the broader FBEU campaign) was poorly received by police, ambulance and volunteer rescuers alike.

It is against this backdrop, when accreditation assessments were being undertaken by Grey's implementation team, and where a 'hard fought and bitter public battle for rescue rights'[269] was being waged, that a major test of regional rescue capabilities occurred. The incident would be one that shocked the nation and in turn attracted misplaced opprobrium and public debate over the role of the Police Rescue Squad.

NEWCASTLE EARTHQUAKE THE RESCUE AND AFTERMATH

Australia is not generally known for intense seismic activity as it sits wholly within a tectonic plate. Yet the continent does experience large numbers of relatively small intra-plate earthquakes each year. The first quake felt by European settlers occurred on 22 June 1788, less than six months after the arrival of the First Fleet. That quake, like countless others after it, lasted a few seconds and caused no serious injury or damage. It would not be until 1989 that an Australian earthquake would result in fatalities; an incident that brought out the best and worst in emergency personnel in Newcastle, NSW's second most densely populated region.

At 10:27am on a pleasantly warm but breezy Thursday 28 December 1989 a 15-second earthquake rocked the city. The quake's epicentre was around 11.5 kilometres under the town of Boolaroo, 15 kilometres west south west of Newcastle's city centre. Measuring 5.6 on the Richter scale, the quake was felt hundreds of kilometres away. In Sydney (160 kilometres away) the Sydney Harbour Bridge noticeably shook and nearby underground trains were temporarily stopped out of concern of damage to the tunnels and tracks.

The force of the quake was amplified in Newcastle's city centre as it is built on alluvial soil. All buildings in the region were violently shaken and over 5000 were badly damaged or destroyed.[270] Critical infrastructure faltered and in places failed. Both Newcastle's main fire and ambulance stations (each containing communications centres) were badly damaged, the police and ambulance radio networks failed and the city's telephone exchange (including local 000 operators) was temporarily evacuated because of safety concerns. Newcastle's hospitals were damaged, the largest one requiring complete evacuation under threat of building collapse. The city's steelworks implemented an emergency shutdown procedure that quickly burned excess gas in the facility's coke ovens; flames and belching smoke plumes emanating from chimney stacks gave an eerie and frightening impression that the complex could explode. This added to the sense of chaos and bewilderment on the part of many thousands of people (residents and holiday makers) who fled into the streets, emergency

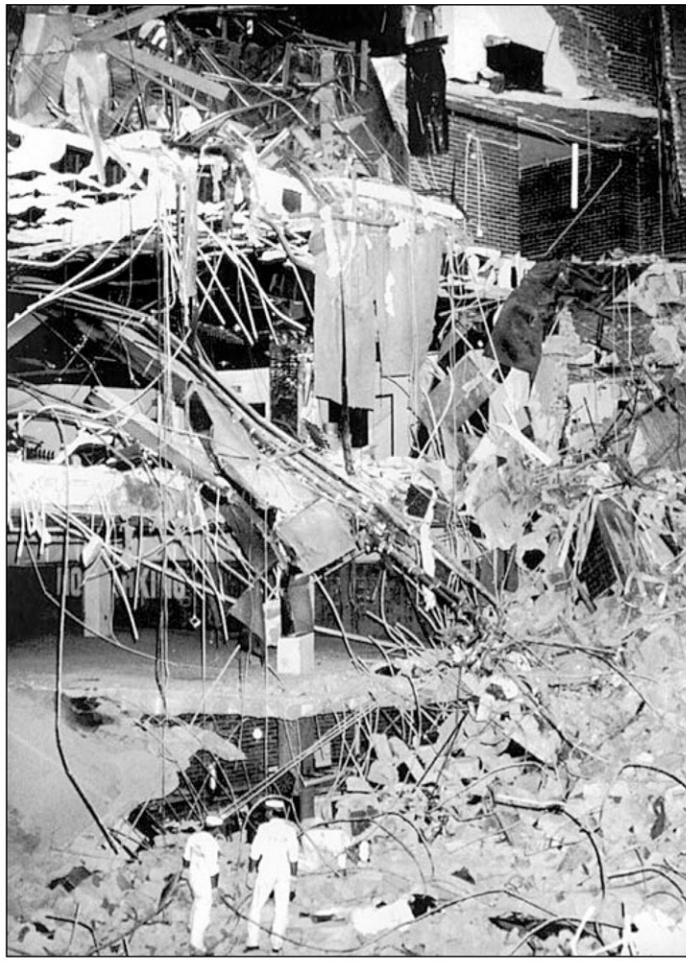
workers included.

Devastation was widespread. Whereas on the city's outskirts destruction to buildings appeared to be randomly isolated, in the city's centre entire streets were badly damaged. One street to particularly suffer was Beaumont Street in the inner-city suburb of Hamilton. Awnings and the front walls of several shops fell onto the footpath and road below. A policeman who was patrolling the street at the time later said to a newspaper reporter:

> 'I was just getting out (of the patrol car) when, as well as smoke, dust started filling the whole street. ... Suddenly there were people running, crying, panicking – there was pandemonium.'[271]

Two men standing in front of a Beaumont Street pub were killed instantly in the collapse. An elderly lady had her leg brutally amputated by the falling rubble. Nearby, a young boy suffered a fractured skull and was partially trapped. Passers-by, police, ambulance officers and firefighters all descended on the street to sift through the rubble, manually moving the debris to locate survivors and victims.

Off-duty at his home and repairing a fence the time of the quake was the OIC of Newcastle's Police Rescue Unit, Sergeant Ron Gibson. He had one of the Hinos parked outside, as he was rostered to work the afternoon shift. Immediately after the quake ended Gibson turned on the Hino's police radio and heard patrols frantically talking to each other as VKG was off the air. Donning his overalls, the sergeant responded to a report of an explosion at a bakery in a shopping centre at Wallsend. On the way he heard the dayshift rescue crew request a callout of various VRA and SES units from surrounding towns. At the bakery Gibson used the vehicle's ambulance radio to request assistance to treat a badly burned employee. Intermittent contact with VKG resulted in Gibson being tasked to another explosion site but he stopped on the way to render first aid to two seriously injured people lying next to a partially collapsed two-storey building. With the building's wall beginning to sway in the wind, the sergeant moved the two to safety and awaited ambulance support. Afterwards, Gibson heard a call from a Highway Patrol unit requesting rescue equipment at the Newcastle Workers Club as it had collapsed and there were people trapped. He immediately drove at speed to the club.



The scale of the destruction to the Workers Club can be seen in this photograph. Note the two rescue operators standing on the rubble at the bottom of the photo. Photo: Newspix.

The large multi-storey inner city Workers Club had been open and trading with around 300 (mostly elderly) holidaying customers at the time of the quake. The building reacted to the quake like 'jelly in a bowl';[272] a loss of lateral support in the building's western wall triggered the collapse of large sections of several floors into part of the multistorey basement car park. The damaged part of the basement in turn became a rubble pit with an oppressive atmosphere of hot air, partial daylight, petrol vapours, dust and the echoing shouts and yelling of both injured and rescuers alike. Customers and staff were also stuck in upper floor areas whose exits had either

disappeared in the collapse or were blocked by damaged walls. Winds and precariously damaged walls prevented firefighters from using their aerial appliance to reach these people. Instead, firefighters erected scaling ladders from inside the basement to those floors where people had gathered.

Gibson arrived at the club just under an hour after the earthquake. He inspected the building with other uniformed and plain clothed police and observed the large mass of rescuers and hangers-on congregating mostly in two areas of the basement, near the western wall. Small paths had been formed within the rubble, as had human chains of people moving debris from the areas where victims had been located. Unused rescue equipment and other items were left on pathways, making access and egress difficult:

> 'There was literally hundreds of people down there removing debris (and) doing their own thing'.[273]

After arranging for some lighting to be erected in the basement area, Gibson made his intentions clear to the growing number of police rescue operators[274] who were arriving at the club (most of whom had recalled themselves to work in anticipation of a big day ahead):

> 'We tried to get some sanity into the scene ... (and) were able to start to organise ourselves. ... We physically removed equipment that was not needed (and) in the way of rescue operations.'[275]

Leading his team into the basement, the sergeant assisted in the rescue of one trapped victim but unsuccessfully attempted to get non-essential personnel to leave. To his surprise, Gibson was soon joined by two members from Marrickville, Inspector Ken Holmes and Senior Sergeant Peter Robb. The two had flown to Newcastle in a PolAir helicopter,[276] their journey saw them fly over multiple convoys of police, fire and ambulance vehicles, heading north from Sydney to assist. A total of nine Police Rescue Squad vehicles with crews were on the way, including Rescue 2, the Pennant Hills, Blacktown and Frenchs Forest trucks, smaller vehicles and the catering truck.

Gibson quickly briefed Holmes on the situation. Believing the site to be a scene of 'mass confusion'[277] the inspector assumed the role of Police Forward Commander. This freed Gibson to focus on basement rescue operations. Holmes then examined the building with some senior officers from other emergency services, the club's manager and civil engineer Mr Robert Sirasch. What they saw was deeply

concerning. A large section of the building's western brick wall (estimated to be 300 tonnes in weight), supported only by a portion of collapsed roof laying across the top of the wall, was leaning precariously at 60 degrees over the rubble and rescuers below. Holmes immediately ordered the removal of all non-essential personnel from the building and an extension of the inner perimeter cordon from the building alignment to the footpath kerb, and later to the other side of the road. The order was ignored on a number of occasions by firefighters in particular, even though agreements were reached between senior officers that excess personnel from all agencies should be redirected to other duties.

In stifling temperatures police rescue operators work in the rubble to locate and rescue victims.

From around lunchtime the Sydney-based police rescue operators began to arrive in Newcastle. Several were tasked to set up infrastructure such as tents outside of the club, along with members of the various SES and VRA units that had also arrived. VRA radio operators were also able to establish reliable communications for the police and other rescue agencies within Newcastle, and between Newcastle and Sydney. At the club, scaling ladders were set up to enable access and egress from the footpath into the basement, as there were growing concerns that the favoured route down a ramp

that was actually part of a collapsed floor was dangerously unstable.

Inside the basement Gibson continued to be concerned about the numbers of people present. He also received engineering advice that the human chain of debris removal was proving counterproductive as the debris was just being moved to other parts of the already unstable basement area. A number of people also reported feeling parts of the slab moving. Outside the club Holmes saw information from seismologists in Canberra that after-shocks of considerable magnitude could be expected within 12 hours of the earthquake:

> 'I was concerned ... whether these rescuers were doing a good job ... (in that) if the building collapsed, they would all be lost. A lot of them ... (appeared to be) doing nothing (but) just standing around looking, so I ordered them out'.[278]

The order was not well received, particularly by a group working to free a badly trapped 75-year-old gentleman near the partially collapsed western wall of the building. Mr Albert Bender's injuries were such that paramedics had been unable to stabilise him no matter what techniques, drugs and blood they applied. Just prior to the evacuation order being made Mr Bender had passed into unconsciousness and the paramedics were very concerned for his life.

In the street, Holmes addressed the senior staff of the various agencies and advised them of his concerns. He planned to allow small groups of rescuers back into the building for 30-minute rotations to rescue the three remaining victims known to be alive. The teams were to be service oriented, with two police teams to be the first in, followed by teams from the Fire Brigades. When briefed about Mr Bender's status, Holmes immediately agreed to attaching two paramedics to each team of four rescuers, so as they could provide medical assistance to people in need.

About 15 minutes after the club was evacuated the first police team with paramedics returned to the basement. They immediately made their way to the location of the three known victims. Sadly, by then Mr Bender had died. Within 25 minutes the team were able to recover the man's body and rescue the two other victims still alive. The leg of another deceased victim was also recovered – the torso could not be located for some time.

At that time police were uncertain of the exact number of victims still inside the building; investigations tended to suggest it was little more than a handful. As time passed extra search teams began tap-

and-listen operations in the basement while others were tasked with recovering the large amount of money stored inside the building and in the club's poker machines.[279] By chance that afternoon engineer Sirasch, using a hired cherry picker to view the remains of the club's auditorium area on an upper floor, heard singing coming from within the rubble. The weak voice belonged to one of two 'roadies' for a popular rock band who were setting up equipment for that evening's concert. The man had survived the collapse by diving into a toilet block.

Garry Smith and Tony Malone from Marrickville, along with ambulance personnel, entered the club to find and rescue the man. As they negotiated their way through the badly damaged upper floor, Malone noticed a big toe protruding from a pile of rubble near in a side room. After carefully removing some of the debris, the group realised they had located the body of another man (the second roadie). They resumed their search and soon found the other man wedged in a confined space in an unstable part of the floor, with partially collapsed material situated precariously above him. With the team doing what they could to remove this surrounding rubble, Smith returned outside and commandeered the cherry picker with the aim of accessing the site from the opened side of the building.

A member of the public volunteered his services, as he was an experienced cherry picker operator. He delicately manoeuvred Smith several times over a damaged wall and into the space behind it and between the floors with the roadie. There, above the rescue party and trapped victim, Smith slowly removed what was later estimated to be around two tonnes of debris. It was placed into an industrial kibble that was also raised into position by a crane. After 'considerable time'[280] and numerous loads of debris were removed, the kibble was raised with a paramedic and stretcher on board. The now unconscious roadie was placed into the kibble and lowered to the ground. The rescue party were also able to recover the other victim and carry his body to the ground in a Stokes litter.

Subsequent rumours that the survivor had been with his young daughter at the time of the quake led police to recommence their search of the auditorium area, a two-hour period during which they also secured a large metal façade which was blowing around in strengthening winds. Unable to locate the daughter, and with detectives unable to contact the man's family, at 9pm Smith travelled to the hospital. There the man had just regained consciousness after

an operation and told the sergeant that he did not have a daughter – the only person with him was his now deceased work colleague.

During the course of the afternoon and into the evening, firefighters (and later police) used hand-held thermal imaging cameras in the rubble, hoping to locate trapped people. No one was found. At dusk a bobcat was brought in by firefighters to help remove rubble that had been piled up by a new human chain of searchers. Tap-and-listen searches continued for several hours, with one instance of an SES operator reporting she heard something from under the rubble. After calling for silence, Peter Robb used a stethoscope to listen for sounds but he heard nothing.

Concern for the safety of rescuers led to the halting of excavation works and the demolition of the western wall around 8pm. Predicted by engineers to topple at any minute, the wall had become too dangerous to remain in-situ. Having formed the view that anyone still in the rubble was most likely dead, Holmes authorised the subsequent use of heavy machinery to remove sections of debris. This posed a structural risk to the remaining walls of the building so civilian riggers, military engineers, police rescue operators and the VRA squad from the Central Coast spent several hours through till midnight, shoring up each floor of the building. Cars were also pulled out of the basement area, giving police further insight to who was in the building at the time of the earthquake. Around 1:30am on Friday 29 December 1989 the operation was suspended for the night. The majority of personnel were stood down and slept where they could.

Marrickville's Rob Golding (front) and Neville Graham sleeping on the grass verge across the road from the Workers Club, during a rest period late on the afternoon of the day of the quake. Photo: Fairfax.

At a meeting of agency representative about 8am on the Friday it was agreed that it was unlikely that any victims were alive although the VRA's Cave Rescue Squad and paramedics would make one last search. When that search proved unsuccessful, rescue resources were substantially reduced as industrial machinery was brought in to clear the site. Most Sydney-based police personnel were ordered home, except for crime scenes police who staffed a DVI team, along with local police rescue operators. The police remained outside the club as demolition crews slowly cleared the rubble. When a victim was located, work halted to allow police to descend into the rubble to examine and remove remains. Those Newcastle rescue operators not detailed to the club worked with SES crews to inspect other damaged buildings in the city.

Just before dawn on Sunday 31 December 1989 the last two victims were discovered entombed in the basement of the club. The two elderly men had been mates and were talking to each other when the club collapsed – their bodies were found together amidst large amounts of concrete, steel and rubble. The suddenness of their deaths was indicated with one man (a club employee) still holding tools in his hand. In a 'painstakingly slow'[281] process the rescue operators

carefully cut through and removed debris to gain access to the bodies, and then carry them from the site. During this entire phase crime scenes police photographed the site and recorded data for DVI purposes.

Brian Plews and Jim Williams carrying one of the victims from the rubble in a Stokes litter.

In total, nine people died at the club and three in Beaumont Street (including the elderly lady who had her leg amputated by falling debris). Another elderly lady became the 13th victim when she died in a nursing home on 29 December 1989 as the result of shock induced by the quake on the previous day. One hundred and sixty two people had been treated in hospital for injuries incurred at various locations.[282]

The earthquake had been an unexpected and terrible event with widespread damage and destruction. As deeply tragic as the incident was to the victims and their families though, and as traumatic is it was for some rescuers, the scope of life lost and injured was fortunately modest for such a large and unprecedented event. The consensus within the Police Rescue Squad after the event was that once the unavoidable chaos and confusion during the period immediately after the quake had passed, operations at the Workers Club were relatively straightforward:

'The type of work that was required was slow, laborious and

sporadic sifting, mixed with investigation work to assess who may have been in the club.'[283]

In the operation's aftermath a series of intra and interagency debriefs were conducted. Some were formal, others (much) less so. On Thursday 1 February 1990 an interagency debrief was held at the Newcastle City Hall with senior officers and dignitaries including the city's Lord Mayor. Drawing on the lessons learned by various intra-service debriefs, constructive criticism was made of the overall emergency operation. Recommendations included better liaison and communications between the agencies, better identification of personnel, a review of disaster planning procedures, central media liaison and a review of powers for police to prevent unauthorised demolitions.[284] No serious complaints were made about the conduct of police during this debrief.

Instead, scathing criticisms of police rescue operators were published in a Sydney newspaper less than a fortnight later, on Wednesday 14 February 1990. The comments emanated from an edited transcript of the Fire Brigades' in-house debrief conducted in Newcastle on 30 December 1989. Numerous firefighters had been strongly critical of their own hierarchy and other services, especially the Police Rescue Squad. Though arriving first at the club, firefighters felt excluded by the police and that their equipment (such as their thermal imaging camera) were ignored. One experienced firefighter even said that that police prematurely demolished the club's wall. The then State Coroner Kevin Waller later wrote:

> 'The officer in charge of the Fire Brigade debrief allowed the meeting to degenerate into a grouch session, with various members expressing jealousy, dislike and petty criticisms about the other services, especially the police and army.'[285]

A summarised transcript was produced after the debrief. It contained some transcription errors, and errors in fact:

> 'All this was bad enough, but became infinitely worse when some clown released [the transcript] ... to the media. ... What had been a wholehearted and courageous effort at rescue had turned into a public relations disaster.'[286]

The criticism stunned police rescue operators in Newcastle and Marrickville. Ron Gibson first heard about the details of the Fire Brigades debrief when a journalist telephoned him at home at 6am on 14 February seeking a comment. The sergeant provided a short

but robust defence of his team. Privately, he knew that there had been some griping, however he felt that any concerns had been assuaged when he gave explanations for police actions and decisions in the days after the quake to local ambulance officers and a senior firefighter. Ken Holmes was similarly (unpleasantly) surprised given that only one senior firefighter had raised an issue with him, and he believed he had dealt with the matter.

Elements of the media reported the allegations with a sense of unquestioning fury. The story gave immediate rise to community concern. Senior politicians and service chiefs provided brief and moderated statements, toning down or denying wrongdoing but careful to not compromise the pending coronial inquest. These comments weren't enough to dampen rampant media speculation and criticism. The newspaper that broke the story called for nothing less than a royal commission into 'police bungling'.[287]

Concerned with developments, State Coroner Kevin Waller (who had briefly inspected the club on the day of the quake) determined that his planned inquiry into the earthquake-related deaths would be expanded to include an assessment of the facts surrounding rescue operations:

> 'I wished to restore the reputation of the emergency services so that they would command the respect of the public. It seemed that the morale of these men and women should be repaired, and that the community have confidence that the response to disasters would be conducted in a competent manner.'[288]

After his agents collected all relevant witness and material evidence, the Coroner grouped criticisms against police to three themes; claims that rescue workers were withdrawn from the Workers Club site without reason, that when the wall was demolished it fell onto a place where victims were still alive, and that firefighters were not fully utilised at the club.

Amidst intense media scrutiny the coronial inquest commenced on Monday 2 July 1990 at the Newcastle Court House (itself being repaired from quake damage). During the three-week inquest scores of witnesses were called to give evidence or had their written statements tendered as evidence. The evidence examined ranged from the science of earthquakes to building standards, medical evidence and the rescue effort. Numerous firefighters, paramedics, police, civil engineers, physicians and other specialists were cross-examined in

considerable detail by the coroner and no less than five barristers (with supporting solicitors) representing different parties. The Fire Brigades and FBEU each had a barrister representing them; the FBEU in particular ardently stood by a substantial portion of the claims contained in the leaked debrief.

Firefighters were critical of what they believed to be an overly cautious approach by police who appeared to be more concerned with the safety of rescuers than the lives of the victims. The police officers called to give evidence strongly defended their actions. When grilled about ordering people from the building, Holmes drew upon over two decades of rescue training and operational service, and the doctrine from the numerous emergency management courses he had undertaken – the first priority at any operation was the safety of the rescuer, for a dead rescuer was of no use to anyone. Gibson similarly countered criticism of his actions with the principles learned from his operational experiences and rescue training.

As the inquest entered its final week Mr Waller indicated to the lawyers representing the Fire Brigades and the FBEU that they should reconsider their allegations against police. The implication of this advice was obvious to all – given the totality of the available evidence, he was prepared to be openly critical of firefighters if they continued to pursue their line of attack. Partial public retractions were made, the legal representatives for the Brigades admitted the debrief contained 'seriously misleading' errors and 'should accordingly be discarded as unreliable'.[289] While the Brigades did remain critical of some aspects of police actions, the coroner was nonetheless thankful as the partial retractions took 'a lot of tension out of the proceedings.'[290]

Contrary to the complaints of some firefighters and elements of the media, State Coroner Kevin Waller praised the efforts of police and other rescuers, calling them heroes.

On Wednesday 18 July 1990 the State Coroner's findings were delivered in a 25-page document. He was satisfied the Workers Club was in a dangerous condition and that the police had the lawful authority to effect an evacuation. Mr Waller found the move to restrict access to the building was the 'best decision' given the known facts at the time; indeed it remained the best decision at the time of the inquest.[291] Apart from Mr Bender, all the victims at the club died instantaneously during the quake so could not have been alive when the wall was demolished. Similarly, the use of the thermal imaging cameras on this occasion would not have located any live victim. Finally, Mr Waller indicated that no blame could be apportioned to any person for Mr Bender's death:[292]

> 'No life was lost which could have been saved, and no rescuer was seriously injured. All rescue services had their heroes. It was disappointing then to see and hear published ... material in the leaked document, which presented our rescuers in an entirely different light. The erstwhile heroes were made to

appear to be petty squabblers. One can only suppose that the clandestine supplier of the summary had no appreciation of the damage he was doing, particularly to his own unit, whatever that was.'[293]

MAINTAINING A HIGH OPERATIONAL TEMPO

The workload for police rescue operators throughout NSW continued to increase during the second-half of the 1980s. In Financial Year 1987/1988 the total number of incidents attended by all police units was 3839, 2501 of which were road rescue calls and another 371 involved the operators preparing and serving around 50,000 meals.[294] In 1989 the total number of incidents attended peaked at 5219.[295] The following are just a sample of the diversity of the work.

Just after midnight on 28 December 1987 police received a report of a missing fisherman near Bluefish Point, at Sydney's North Head. In a ferocious gale and driving rain, Frenchs Forest rescue operators Senior Constables Al Lukes and Vic Rulewski responded. At the car park at the top of the headland they were briefed on the details of the missing man and then set off into bushland down the cliff's walking track with Sergeant Bruce Thomas from Manly Police Station. The three carried handheld torches, a rope and a portable radio – the gale made carrying anything heavier into the unknown darkness too risky. The rope was used by the police to lower themselves down the final part of the cliff. On the large rocks along the shoreline, the trio struggled to see just a few yards in front of them because of the driving rain. Indeed the wind was so strong and constant that they had to lean into it just to stay upright. After 30 or so minutes of fruitless searching the three were about to withdraw when Lukes glimpsed a hand waving from among rocks below him, at the actual shoreline.

The fisherman had barely survived falling off a large rock and had managed to inch himself to a part of the rock shelf that gave a tiny amount of protection from the elements, but he now had swelling the size of a fist on his spine. Concerned about paralysis, the police dare not risk moving the fisherman until special equipment could be brought down. The portable radio proved unserviceable in the torrent of rain so it was agreed that Thomas would return to the top to arrange for more help. The two rescue members stayed behind to protect the fisherman; they physically leant over him in semi-kneeling positions, each with a knee resting against the man's abdomen. The police held on 'literally for dear life'[296] to the rocks above them, with their backs to the surf that continued to crash

around them in the pitch-black darkness. Although their torches had by this time run out of power, they were subsequently spotted by the searchlights from both a police launch and a rescue helicopter, neither of which though could assist because of the pounding seas and violent winds.

Over an hour later, Thomas and a rescue party of police and fishermen arrived carrying the equipment. They began their delicate work of placing the fisherman onto a spinal board, and then into a litter. While this occurred, at the top of North Head the Marrickville squad were setting up the Cliff Rescue Machine to extract the victim. A brief lull in the weather enabled the helicopter to return and lower its doctor to the rescue party. After almost being blown into the ocean he, the doctor managed to crawl to the group and inspect the patient. The group then spent almost an hour inching along 100 metres or so of slippery rocks, careful to not accentuate the fisherman's injuries. Eventually they reached a space where the helicopter could winch the litter and doctor up. The rescuers then slowly ascended the cliff to safety, arriving just before dawn. For their actions Lukes and Rulewski received departmental valour awards.

In late April 1988 the Sydney and surrounding regions experienced almost a week of drenching rain. Near the train station in the town of Coledale, to Wollongong's north, a large amount of water pooled and became trapped behind a railway embankment. A manhole designed to allow water to flow away had blocked up and at 3:45am on Saturday 30 April the weight of the trapped water forced the embankment to subside. A wall of mud spilled downwards and destroyed a nearby house. Three of the family of five in the house survived, the mother and her two-year-old son did not. It was the infant's birthday. Neighbours, emergency workers and police rescue operators from Wollongong worked frantically to locate mother and son. The urgency was such that the first police rescue operators on the scene did not have time to change into their overalls, they instead crawled over the roof (the only part of the house protruding from the mud) and began to dismantle it. Arcing power lines near the house heightened the risk to all present.[297]

Working in freezing muddy water that was waist deep at its shallowest, and up to neck level at its deepest, the rescue operators sifted the remains of the shattered building, literally dismantling and examining it piece by piece. After seven hours they found the buried

bodies of mother and son, lying near each other. A lengthy coronial inquest found fault in the actions and inaction of state rail authority personnel in the lead up to the storms. Four officials stood trial for criminal negligence and/or manslaughter. A jury acquitted them.

On Saturday 28 January 1989 Alan Wade and Constables Peter McCartney and Bradley Gabb were called to Prince of Wales Hospital to assist surgeons who wanted to operate on a teenage boy who by misadventure, had been shot in the eye with a spear gun. Three barbed prongs from the spear were embedded in the eye socket area and surgeons had been considering removing the whole eye, when a nurse suggested they call Police Rescue. Wade argued that he and his team could cut the spear in such a way as to give the surgeons the best chance to preserve the eye. Somewhat dubious of the claim, the physicians nonetheless agreed to give the police a chance. Using the small disk cutter from their finger kit for almost 90 minutes, Wade and his colleagues carefully and slowly cut two of the three prongs from the main spear shaft while a surgeon held the patient's head. A steady stream of water was poured over the drill and the spear to prevent overheating; at the same time the teenager was anaesthetised to reduce the pain. After the police were finished, surgeons were able to remove the barbed tips and the boy retained his vision.

During the Christmas holiday period of December 1989 two 14-year-old boys were reported missing from their homes in the rural region of Pheasants Nest, to the southwest of Sydney. A high profile multi-day search and rescue operation failed to locate the two and was subsequently called off. On a stinking hot summer's day on Thursday 4 January 1990 engineers commenced an inspection of the Pheasants Nest Bridge, which supports a freeway across the Upper Nepean Gorge. The check was part of a wider infrastructure inspection program implemented in the weeks immediately after the Newcastle Earthquake. About five metres to the side of the roadway and down an embankment the engineers discovered an unlocked access cover. The cover led into an enclosed cavity underneath the length of the bridge, which in turn had access to the hollow insides of the bridge's massive 36 metre concrete support pylons. Emanating from the cavity of one pylon were hundreds of blowflies and a rancid smell so foul that police were called. Upon torchlight inspection at the top of the pylon officers saw the manhole cover dislodged and two bodies at the bottom of the pylon, lying in a maggot infested pool of black still water.

Rescue operators from Marrickville and Green Valley, led by Peter Robb, joined forensic police, detectives and general duties personnel, along with rural firefighters, ambulance and SES crews. The media also hovered nearby. Recovering the bodies posed a serious conundrum. The state of decomposition and the confined space significantly raised the risk of the presence of toxic gases. Hopes to cut through a sealed concrete door at the base of pylon were dashed with engineering advice that to do so would risk the structural integrity of the entire bridge. Police would instead have to rope down the inside of the pylon, a normally tricky task made dangerous because of no natural lighting, the intense heat amplified by the floodlights set up in the cavity, and a lack of anchor points for ropes. To add further difficulty, the rescue operators would have to descend in the confined space wearing Dräger breathing apparatus and negotiate metal rods protruding from the concrete walls, just above the bodies. It was a challenge unprecedented in the experiences of all present.

Constables First Class Lance Rice (Green Valley) and Kevin Higgins (Marrickville) were selected to descend, photograph the scene for forensic police and then recover the victims. As they prepared themselves, others improvised anchor points for the ropes. In the late afternoon a metal gantry was delivered to the site on the back of a truck, it was disassembled piece-by-piece and then reassembled inside the cavity, next to the top of the pylon. An improvised metal A-frame with a pulley was then erected over the opened manhole leading to the centre of the pylon. A rope was anchored on the gantry, fed through the A-frame and lowered. A hauling party then took up station to raise and lower the two rescue operators.

Higgins was lowered first, wearing a compact canister-type breathing mask in the hope it would work until he reached the bottom and when a full breathing apparatus could then be lowered to him. Almost straight away though the canister began to fail; it could not adequately filter the toxic air. Hauled back to the top, the rescue operator put on a Dräger and was lowered again. The journey down was more cumbersome due to the size of the apparatus and how it adversely impacted on the operator's centre of balance while on the rope. Rice (also wearing a Dräger) was then lowered and the two set about examining the bodies and searching the rancid water. Within minutes a whistle sounded; the alarm in Rice's Dräger indicated he

was running out of air. A new air cylinder was lowered and the two police set about the standard drill of replacing it however the slime over both men's hands made it impossible to do quickly. Soon out of fresh air and unable to hold his breath for any longer, Rice ripped off his visor and had to breath in the toxic atmosphere for a few moments until Higgins was finally able to connect the hose to the new cylinder.

Now able to breath fresh air again, Rice resumed working with Higgins to photograph the bodies and then place them into separate body bags. A Stokes litter was lowered from above and each body was raised in turn by the hauling party. This process was complicated and lengthened by the need to turn off the lights to allow the police radios to work – the fan-cooled motor powering the lights created too much electronic interference in the confined space. Stuck at the bottom of the pylon, both policemen found the total darkness during these minutes to be somewhat unsettling, yet it was the only way they could communicate with those above. The degree of discomfort was heightened by the water saturating the men's clothes, water that was filled with maggots and stained by the rotting corpses. Further, as one of the body bags was being pulled through the opening at the top of the pylon, a protruding bolt ripped a hole in the bag, causing the fouled water to fall below and drench Rice. Eventually, after more than an hour in the cavity (and 10 hours after police were first called to the scene), both operators were raised to the surface.[298] Once at the top each rushed outside to be decontaminated by being excessively drenched with water and bottles of soapy disinfectant. The men's overalls and underclothes were taken off and subsequently burned.

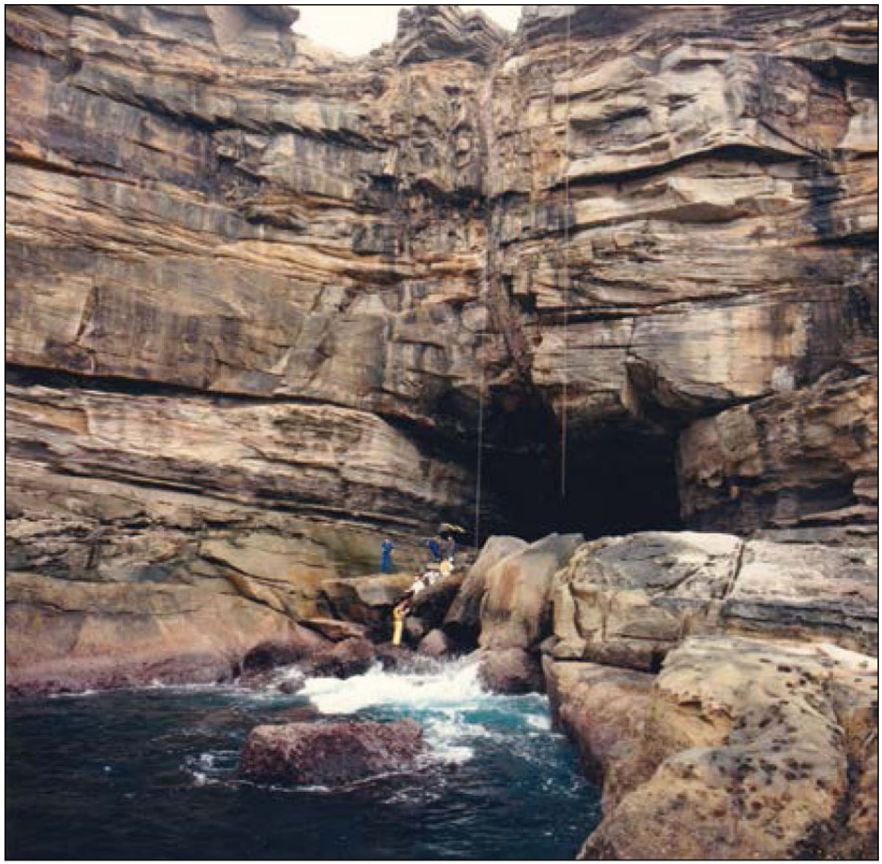
An exhausted Lance Rice immediately after ascending from the base of pylon of the Pheasants Nest Bridge.

The recovery operation was a 'harrowing'[299] experience for all those closely involved. To everyone, including the veteran rescue operator Robb, it was the toughest and most technically demanding operations imaginable. Everything about the recovery was difficult and totally confronting to the senses. Afterwards the coroner ruled the boys had died by misadventure and not foul play (a possibility in the forefront of the minds of the police on the day). Rice and Higgins

later received departmental valour awards for their efforts yet the psychological impact of the incident on several police at that scene would be felt for many years afterwards.[300]

The following year Higgins was part of another arduous body recovery operation. On Monday 25 March 1991 an immigrant fisherman was swept off rocks near Curracurrong, within the Royal National Park south of Sydney. The following Friday the man's headless body was found by relatives, tightly wedged between large rocks at the very low tide mark of the base of a nearby cliff. Given the tidal flow of the pounding surf, police only had limited time each day in which to safely access the location. Surf conditions made access from the seaward side impossible, the only way to get there was to drive off-road through otherwise pristine bushland to the top of the cliff and then rope down. Rescue operators from Sutherland and their equipment were lowered over 50 metres via Larkin Frame.[301]

Unfortunately the now bloated body was too tightly stuck to be freed before the tide rose. That evening police undertook detailed planning for the short window of opportunity (about 90 minutes) they would have the following day. In the afternoon of Saturday 30 March 1991 Higgins, Senior Constable Barry Thompson (Marrickville) and Constable Mark Bieder (Sutherland) were lowered to the site, along with crime scenes police and (subsequently) the Government Medical Officer. Offshore, a police launch patrolled the area in case someone was washed off the rocks, and to keep watch for sharks. When all their efforts failed, the operators and the Government Medical Officer set about dismembering the body using a scalpel and other equipment. With just minutes to spare before the area again became submerged, the victim and police were hauled up the cliff. While this was not the first time rescue operators had been present at an incident that resulted in an amputation, it was very much the first time they had been given permission to dismember a body.



A photo taken from a police launch on 30 March 1991, during the body recovery operation near Curracurrong.

Monday 10 June 1991 was a stormy and bleak winter's day in Sydney. Mid-afternoon, Engadine Police Station[302] received an urgent telephone call from a resident who lived near Heathcote Creek, inside the Heathcote National Park (between Sydney and Wollongong). The concerned resident said he had three saturated teenage boys at his house reporting that two 15-year-old girls were trapped on the other side of the creek. The group of five had crossed the normally narrow stream the previous day to camp in bushland, but torrential overnight rains had wreaked havoc. The boys chanced their luck and were able to make it back across, the girls stayed behind and found themselves in trouble. After receiving details, Engadine's Police Rescue OIC, Sergeant John Glossop, along with Senior Constable Ken Hutt and Constable First Class Greg Moon, quickly loaded the station's four-

wheel drive with roping kit, lighting equipment and a wetsuit from the Hino rescue truck. The smaller vehicle was used as it could descend the very steep, muddy track from the nearest road to the edge of what was now a raging torrent of stormwater and debris, in places over five metres deep.

At the shoreline police and the resident could just see the two girls about 40 metres away, shivering badly and clearly in distress. Extremely low hanging cloud, rain, wind and darkening skies ruled out a helicopter rescue – especially given nearby overhead power lines that were barely visible because of the heavy mist. After donning the wetsuit, Moon unsuccessfully attempted two crossings of the river, each time he became tangled in debris and had to abort. Glossop used his previous navy training to weight a rope with a large rock and he then successfully threw the weighted end over the swollen creek to the girls. The distance was close enough that the police could shout to the girls and explain how to secure the line to a large tree. The men then secured their end of the rope to another tree.

Attached to the main rope with a carabiner, Moon crossed the river hand-over-hand. Once across he instantly realised the poor physical state of the two teenagers. He placed the most distressed girl into a harness that was then hooked to the main rope with a carabineer. Her harness had a rope tied to it, which Glossop, Hutt and the resident used as the hauling line. The three men started to pull the girl across the river while she held onto the main line, and was held by Moon who followed her. In the rushing rapids, and with the weight of the two people on it, the main rope bowed significantly. At times the girl was dragged underwater, only to be held by Moon who did his best to keep her head up. Within minutes the two were across and the girl was raced up the dirt track by Glossop in the four-wheel drive to a waiting ambulance. He promptly returned with two ambulance rescue operators who had arrived to assist.

By this time the sun had set and the only light available was from the small portable lighting set that had been brought to the site by police. Moon crossed the river again and placed the second girl, who was now hypothermic, into the harness. As she was being hauled across the river, and about 10 metres from safety, the severely weakened girl let go of the rope. With her harness attached to the main line, the force of the rushing water in effect trapped the girl

under the water. The constable did his best to pull her back to the line but he was also starting to weaken from the intense cold and could only get her hands above water. Glossop, still in his white overalls with gun belt, and no safety line attached, instinctively jumped into the torrent to grab the girl. He was successful but his own safety was at significant risk from the deluge. Within seconds he somehow managed to steady himself and in turn was grabbed by Hutt. Both girls received medical treatment and were reunited with the families that evening. For his efforts Greg Moon was awarded a NSW Police Commissioner's Valour Award, the three police received a NSW Children's Week Award for their efforts and the resident and his wife were formally thanked by the Force.

Rescue operators from Goulburn[303] were called to what was initially reported as a check welfare incident in the Bungonia Gorge on Thursday 6 May 1993. Situated within a national park, the gorge is a popular abseiling location due to its sheer, steep cliffs and Goulburn rescuers know the area well. In the late afternoon the previous day two experienced rock climbers had commenced abseiling, the survivor later telling police their purpose was to take photographs. Abseiling in stages due to the limited lengths of rope they had, the two found themselves still on the cliff face when night fell. In the now pitch-black conditions, one of the climbers misjudged how much rope he had left mid-descent, ran out of rope and fell to his death. Sensing disaster in the darkness, the other male tied himself to a tree until morning and then in a mildly-hypothermic state, lowered himself to the valley floor.

Meanwhile at the top of the gorge police had arrived after the deceased man's partner called them expressing concern that something had gone wrong. Tied to ropes, two rescue operators leant over the cliff's edge and sighted the body of the dead man near a creek. A PolAir helicopter was used to recover the victim and his friend. Four days later police returned to the location for a follow-up operation. The ropes used by the two climbers had been left on the cliff and had to be recovered for the coronial investigation. The two-hour descent by Constables Terry Betts and Phil Downes was challenging. The length of the drop was such that three ropes had to be spliced together for each operator. The late autumn sun disappeared from the gorge mid-afternoon, the darkened shadows brought about an eerie feeling of dusk. The recovered lengths of rope and the limited amounts of equipment used by the deceased rock

climber and his friend were later tested by police and found to be of average quality, with some of the equipment malfunctioning. In his findings on the matter the coroner said the adventure was ill conceived.

Bathurst rescue's Senior Constable Bob Cooke was faced with the real prospect of dying during a body recovery operation on Tuesday 26 October 1993. The previous Sunday police had been called to a sighting of a crashed plane, inside the Kanangra-Boyd National Park (in the western portion of the Blue Mountains). Three weeks earlier the light plane flown by an inexperienced pilot went missing, and although there was an aerial search conducted by 100 aircraft that covered 40,000 square kilometres, the plane was not found.[304] On Sunday 24 October a bushwalker in the park using binoculars, by chance saw wreckage glinting in the sun on the distance. Suspecting what he had seen, the bushwalker alerted authorities.

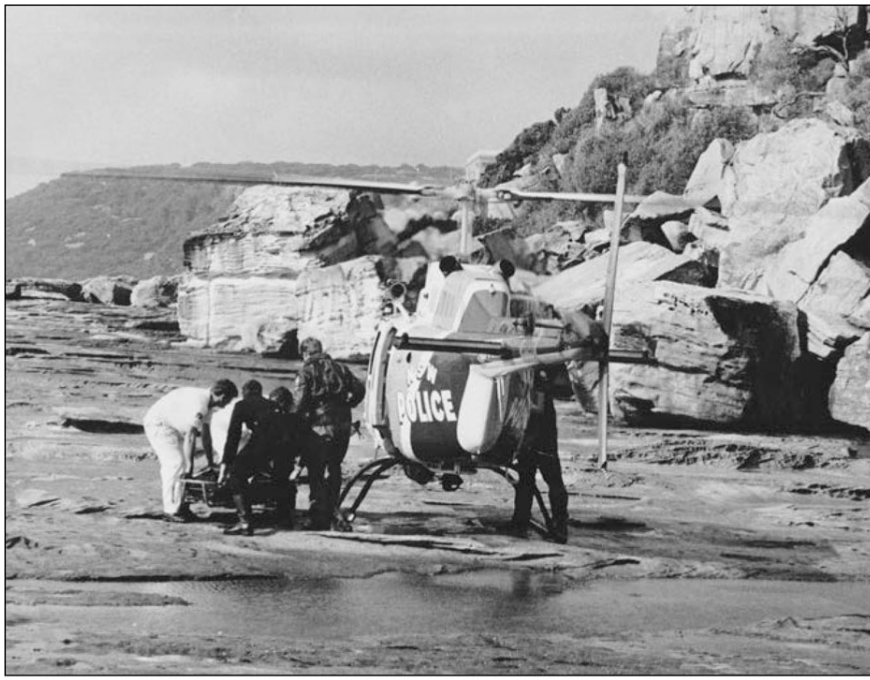
After a long walk to the site, searchers found the plane largely intact, midway up a steep slope in one of the wildest valleys in the mountains. The fuselage was turned to one side and had been burned out. Puzzlingly, neither of the plane's occupants could initially be located. Unfastened seatbelts suggested they left the site but a detailed search could not be mounted until the following morning, when two badly burned bodies were located two kilometres from the fuselage. The injured men had survived the crash and crawled through the scrub, down the valley, to a large creek. There they died, about 80 metres apart. The passenger was found lying alongside the creek; his pilot friend was partially submerged.

The bodies of the victims were flown out of the valley in helicopters and the search teams began the long trek back to the forward command post and their vehicles. Inclement weather and strong winds were approaching. Mid-afternoon a PolAir helicopter returned and directed Cooke's team to a small clearing at the crown of a nearby ridge where they would be winched up one-by-one. As team leader, Cooke was the last to be collected.

By the time it was Cooke's turn, strong wind gusts were markedly buffeting the helicopter. After considering leaving the policeman behind, the PolAir crew lowered the cable and harness for one attempt. As he was being lifted from the ground though, a blast of wind blew Cooke into the canopy of a nearby and very large tree. Entangled among broken branches, the rescue operator thrashed about to free himself, while the cable connecting his harness to the

helicopter tensed and strained. Further wind gusts buffeted and jolted the aircraft. A few seconds later Cooke sprang from the tree and swung violently under the helicopter – like an out-of-control pendulum.

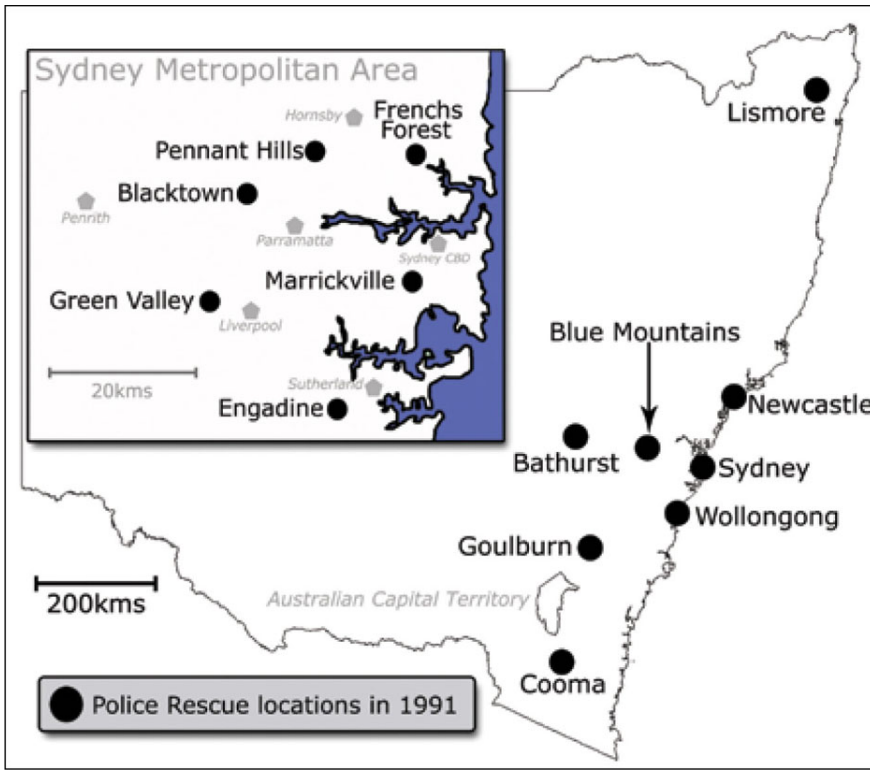
Nothing was said; indeed nothing could be said or heard in the downwash from the helicopter's rotor blades. All present knew the policeman was in trouble. The swinging motion was destabilising the already buffeting helicopter. In such a situation, with the helicopter at risk of crashing, its crew were within their rights to cut the winch cable. The fall would have killed Cooke but the safety of the helicopter and its occupants took precedence. Fortunately, a very brief drop in wind allowed the winch to do its job. Brought alongside the helicopter's door, the rescue operator was grabbed tightly by the loadmaster until the helicopter later touched down at the forward command post. Later, during a conversation the loadmaster confirmed Cooke's fears. With the pilots struggling to keep the helicopter aloft, the loadmaster was seconds away from cutting the cable when the wind dropped. It was a very sobering experience to reflect upon as the policeman sat with the recovered bodies in the rear of a Land Cruiser during the drive to Bathurst.



Police rescue operators and a firefighter about to load a patient into a PolAir helicopter.

Earlier that year, on an overcast Thursday 18 March 1993 a woman suffering from depression perched herself on a ledge above an 80-metre cliff at Echo Point, Katoomba. Experienced rescue operators Sergeants Bill Pearce and Phillip Tunchon from Katoomba responded to the call for help, and approached the ledge in terrible weather conditions of strong winds and intermittent rain. Pearce took the lead in making his way to the ledge and talking to the woman as Tunchon (OIC of the Blue Mountains unit) slowly moved to a position just above the ledge. Despite the weather conditions and the risks to their personal safety, the police did not put on harnesses or use ropes to secure themselves – the woman was too jittery and a delay might have given her the opportunity to jump. Pearce negotiated with the woman for two hours before she suddenly moved towards the edge and police feared she would leap off. Tunchon rapidly descended wet rocks and then jumped onto the ledge to grab the woman and pull her back from the edge. Both police then wrestled the woman to safety and waiting medical assistance. A year later the two received Australian honours for their actions; Tunchon was awarded an Australian Bravery Medal and Pearce a Commendation for Brave

Conduct. The rescue was one of the last Tunchon undertook before handing over the role of OIC to Pearce, and then taking up a senior role in the NSW Police Association. One of the first industrial issues he became involved with in his new role was lobbying government over their decision to close most of the de-cents.



DEVOLUTION – RESCUE'S NADIR

On Wednesday 2 September 1992 the Minister for Police and Emergency Services issued a media release announcing that almost all Police Rescue teams in NSW would be withdrawn from rescue activities. The first to go would be the Sydney de-cents. Others would follow when the local Fire Brigades or SES units were deemed by the State Rescue and Emergency Services Board (SRESB) to be capable of conducting primary rescue operations. The only police units that would retain their rescue accreditation would be the Police Rescue Squad and the de-cents at Goulburn and Cooma.

The intention to 'devolve' the units from rescue duties had been publicly flagged by government as early as February 1991 and then again in July that year. The September 1992 announcement however was the first time that actual dates were nominated. This came as a shock to many, and occurred just prior to celebrations marking 50 years of the Police Rescue Squad. The adverse impact of the announcements, and subsequent developments, would be profound for many police rescue operators both professionally and psychologically. This period proved to be the nadir of the history of police rescue in NSW.

The origins of devolution, and the processes used to arrive at it, date to the March 1988 state elections and a landslide victory to a conservative coalition with ambitions to implement wide-ranging policy reforms. The Minister for Police and Emergency Services in the new government was Ted Pickering, the Liberal Party's then leader in the Upper House and a key 'number cruncher' for the party. A chemical engineer by training and a businessman prior to entering parliament in 1976, Pickering could be very engaging in his dealings with others yet forthright and often dogmatic, at times emotive and prone to making controversial comments.[305] Pickering had spent several years as opposition spokesman on policing matters in the lead up to 1988, during which time he formed firm views on what police should and should not be doing. Rescue fell into the latter category:

> 'I took a very simple view ... the organisation which is nicely spread throughout the metropolitan area is the fire brigade; it's the one organisation of all of them that's got nothing to do.

> I mean literally fire brigade officers do tend to stay at their fire stations doing nothing and that's exactly what we want them to do quite frankly. If we never had a fire we'd all be delighted. So obviously they had all the time in the world to train and they were obviously well distributed in terms of providing an appropriate response time and so it seemed in principle that that was the way we ought to go.'[306]

On Tuesday 28 November 1989 the Legislative Assembly debated the *State Emergency and Rescue Management Bill,* the main piece of legislation to emanate from the findings of Major-General Grey's 1988 review.[307] During the spirited banter the opposition challenged Pickering about Grey's findings that the police were the best placed service to conduct rescues. The Minister responded:

> 'I am sure Major-General Grey is correct technically. In a practical sense it is out of the question.'[308]

The truth was that while Pickering agreed with the majority of Grey's report, particularly as it related to disaster planning and management issues, he was extremely disappointed with the general's findings on who should conduct rescue.[309] Grey's candour (especially his criticism of the Fire Brigades and the FBEU) made it very difficult for the Minister to immediately allocate the lion's share of metropolitan rescue work to firefighters.[310] When he was forced to publicly release Grey's report by tabling it in parliament on Tuesday 14 November 1989,[311] Pickering was further tied to his public undertaking for the SRESB to recommend accreditations on the basis of the advice from an implementation group led by the general.[312]

Earlier in the year the Minister had authorised a marketing campaign for rescue workers, in an attempt to assuage growing uncertainty and to counter the wilder allegations being made by public opponents in the lead-up to the passing of the *State Emergency Rescue Management Act 1989* (SERM Act). This involved unit briefings, media and information releases and the dissemination to all rescue units a government information brochure titled *Its Time to Rescue the Rescuers.* The brochure addressed many of the more common questions raised and was followed by a one-off question-and-answer forum that was televised on satellite television on Saturday 22 April 1989. During the forum Pickering and service chiefs discussed the changes and took questions from rescue operators from all services. The use of satellite television in this way

was a first for NSW.

At its inaugural meeting in mid-February 1990 the SRESB considered and endorsed Grey's recommendations on accreditations. The Minister, as required under the SERM Act, then approved them. Over 300 units were accredited to conduct rescues in either a primary or secondary capacity for 208 designated rural and country areas throughout NSW.[313] Primary units had the lead for all land rescues in their area, with secondary units able to be called upon only if the primary unit required assistance, was unavailable, or already committed to another incident. In the Sydney's Metropolitan Area – covering almost half of the state's population – a total of 31 units were accredited. Unlike the rest of the state, there was no primary or secondary system implemented for Sydney. Instead, each unit was responsible for a designated area of operation, but could be called upon to assist neighbouring units if required.

All six of Sydney's police teams were accredited to conduct rescues; all regional de-cents were given primary accreditations for their local areas with some allocated secondary response for neighbouring districts. In the case of Newcastle and Wollongong both police and ambulance units received primary accreditation. All ambulance rescue units in the state also received primary accreditations, as did most (but not all) VRA units. The SES was allocated a mixture of primary and secondary accreditations in regional areas. While the Fire Brigades were allocated the overall majority of accreditations in the state, most were as secondary units. In the Sydney Metropolitan Area the brigades were allocated 20 of the 31 areas, the police six and ambulance four.

For police the new arrangements represented little change in their responsibilities but it did dramatically shrink their areas of operation. At Wollongong and Newcastle the main organisational challenge was implementing a sustainable system of sharing response duties with ambulance officers. Over the course of subsequent years many different rostering systems were trialled including each unit taking sequential turns at arising rescues, the services taking week-long turns, one service working nights and the other days, and (in the case of Wollongong) subdividing the area of operations geographically (with police operating in Wollongong city and to its north, with the ambulance to the city's south).

The public response by various parties to the new system was mixed, with key players focussed on problems, perceived or

otherwise. The FBEU was a particularly vocal opponent; firefighters either complained anonymously to the media or passed their complaints to sympathetic parliamentarians. Within weeks of the new arrangements for instance, the opposition raised concerns about police actions at three separate road rescues, within hours of the incidents occurring. The first rescue occurred near Sydney's Spit Bridge on Monday 12 March 1990. The other two both occurred on Sunday 18 March 1990; one near St Marys to Sydney's west and the other at Glenbrook in the Blue Mountains.

The Spit Bridge was within a Fire Brigades' rescue area and attending crews had initially indicated they could not effect the extrication of both victims at the same time. As a result, VKG responded Frenchs Forest police to assist, however before they arrived firefighters managed to free both people. At the St Marys incident the local primary unit (fire) was promptly dispatched to the crash, as were police from Blacktown in a backup capacity. The police arrived at the scene first and were able to extricate the victim prior to the arrival of firefighters.

The Glenbrook crash occurred on the Great Western Highway near a volunteer fire station.[314] As that station was not rescue accredited, it was not dispatched. By chance a Marrickville police rescue operator undertaking an unrelated inquiry drove past the crash within minutes of it occurring. He stopped to assess and report (one dead and four injured), and then assisted ambulance crews in stabilising the patients prior to the arrival of the local rescue units (police and fire). Those units, both from the nearby township of Springwood, arrived within 20 minutes and as the primary unit, the police (including the Marrickville operator) extricated the victims.

Contrary to the sub-text of the criticism of the Opposition, reviews of the incidents showed no impropriety on the part of police. Indeed Minister Pickering publicly commended police and other rescuers for their actions. He also attacked the 'blatant hypocrisy' of his political opponents in criticising the new rescue coordination framework,[315] and for using false information from what he labelled disgruntled people.[316]

Barry Thompson from Marrickville using hydraulic spreaders to pry open the badly damaged driver's door of a crashed van on the Gladesville Bridge in October 1990, a few months after the new rescue accreditation system had been introduced.

Within weeks of the new framework commencing it was widely recognised by interested parties that 31 accredited rescue units for Sydney was too many.[317] The new system did reduce the number of incidents where there was an over-response by rescue services, however the large number of accredited units meant that most only attended a couple of calls a week. Previously busy rural units also experienced a notable drop in calls under the accreditation system. The scale of this decline is demonstrated in the statistics for the police alone. Whereas in 1989 the combined total of incidents attended (rescues and non-rescues) for all Police Rescue teams was 5219, in 1990 the number dropped to 4147, and in 1991 reduced again to 3772. The decline was greater for rescue calls, with numbers dropping from 3392 in 1989 to 1869 in 1990, and 1560 in 1991 – a 54 per cent reduction over three years.[318] This had a deleterious impact at each unit (police, fire and ambulance) for rescue skills are perishable if they are not frequently practiced and used. With many rescue operators now going for weeks without attending a rescue,

they began to lose the currency of their skills.[319]

At the same time the Minister wanted to hasten his plan to remove police (and in time, ambulance Q-vans) from rescue operations. He felt that closing down the de-cents was a way of not only diverting more police to frontline crime fighting duties, but also to save monies otherwise spent on rescue equipment and training. The overall budget for the Force exceeded one billion dollars for the first time in Financial Year 1990/1991 and in an otherwise austere period of the state's history, the government was keen to find savings wherever possible. Austerity measures initiated by Pickering included disbanding of the Force's pipe band, decommissioning of the Flood Rescue Squad and a direction to the Force to explore the potential to use unpaid volunteer police.

On Friday 30 November 1990 the Minister directed the chair of the SRESB (and head of the SES) to consider and report on implementing a government decision to devolve the police teams. Two weeks later Howard advised a rapid transfer of responsibilities from police to firefighters was theoretically possible but would endanger public safety as he was not satisfied the Fire Brigades could achieve the necessary 'standards of excellence' required in quick-time.[320] The OICs of Marrickville and the de-cents were nonetheless briefed on the likelihood that police would lose rescue accreditation at some stage in the near future. Despite widespread bewilderment on the part of the operators, police (something for which Pickering told Parliament on Tuesday 26 February 1991 he felt heartened by) did not publicly campaign against this development. In the same speech he indicated the SRESB had agreed to devolve police rescue services to the Fire Brigades, where the latter had full-time units capable of performing the role. The details of devolution were to be worked through.[321]

Police rescue operators from Engadine conducting a road rescue, along with an ambulance rescue operator and a firefighter. One of the police is holding a set of the Jaws of Life. As Minister for Police and Emergency Services, Ted Pickering felt having police and ambulance officers perform rescues was (in general) inefficient and duplicative.

In March 1991 an SRESB Task Force[322] met and considered the issues of; how the changeover could be effected, the new (reduced) number and locations of rescue units required for the Sydney Metropolitan Area, the continuing need for Police Rescue units in the Blue Mountains and Cooma, and the method in which the Fire Brigades should be trained to reach a standard acceptable to the Board. To guide its deliberations the group was issued a series of assumptions based on the Minister's directions to the SRESB Chairman. These included devolving as soon as practicable the Bathurst and Lismore police units, and replacing the police with firefighters in Wollongong and Newcastle. The Minister had supported retaining the Goulburn de-cent unit because the local Fire Brigades were not a full-time unit, and he ordered that leftover

equipment from the devolved teams be sold off if they were surplus to police requirements.

Significantly, Pickering had also indicated that the Police Rescue Squad at Marrickville was to be retained for its cliff and heavy rescue capabilities. He had carefully considered the team's future but acknowledged that it was a repository of considerable experience and expertise:

> 'I thought if I was to close that down it would be to the detriment of the community.'[323]

In its report the Task Force strongly emphasised that in keeping with the principles of the Grey Report, rescue operators in full time services must be volunteers, undertake psychological testing and that the Fire Brigades should aim to raise a rescue service capability rather than have a generalist approach. It recommended that both the Cooma and Blue Mountains units remain operational, although in the latter's case it should lose its primary accreditation for road, industrial and domestic rescue. Police in the Blue Mountains would however retain primary accreditation for specialist rescue (eg: vertical rescue and bush search and rescue) and have an expanded area of responsibility – covering the portion of the Blue Mountains region covered by the soon-to-be devolved Bathurst unit. Overall, the Task Force wrote that police teams could only be phased out when the identified replacement teams satisfied the Board's Training Advisory Panel that their operators were sufficiently competent.[324]

The report was endorsed by the SRESB Board in June 1991, with one slight amendment: police, ambulance and fire personnel in the Blue Mountains were to be combined (in an unspecified manner) to share primary rescue accreditation for road, industrial and domestic rescue. The SRESB Chair made his formal recommendations to the Minister in a letter dated Friday 14 June 1991; the politician subsequently announced his approval publicly on Friday 5 July 1991. Later, in September 1991 he also agreed to an SRESB recommendation to reduce the number of accredited rescue units in the Sydney Metropolitan Area to 19 (six police, four ambulance and nine fire units), which took effect on Tuesday 1 October 1991. Pickering agreed to the rationalisation proposal but still wanted the police de-cents phased out as soon as possible and replaced with firefighters.

A series of administrative and inter-agency developments

prevented a rapid implementation of Pickering's direction. The SRESB it self was a small body of less than 10 staff, heavily reliant upon the support of the various agencies it was charged with overseeing for both rescue and emergency management issues. For their part the services disagreed about training standards and assessment procedures for the units that would replace the police. This was partially addressed when the SRESB implemented an endorsed State Rescue Policy on Monday 22 July 1991 and a training manual soon afterwards. A policy debate then arose between the SRESB and the Minister on the feasibility of establishing a rescue training college in which standardised training could be provided if not to all rescue operators individually, then at least to the training officers within each service (a train-the-trainer concept). It was a debate the SRESB eventually lost. In the meantime the Fire Brigades and SES began to train the units that were to replace the police.

Throughout this period police continued to undertake their duties in spite of an air of uncertainty, frustration and at times despondency, over their futures. As a cohort they were volunteers who passionately believed in their duties and were certain of their skills being unsurpassed. Yet they felt undervalued and under-resourced. An offer by the Minister to facilitate the transfer of police operators to the Fire Brigades if they wanted to continue rescue duties (either part-time or permanently) was received as an insult – one of many instances of the politician displaying a 'tin ear' to the general feelings within the police rescue fraternity.

In the main, police kept their growing anger hidden from the public eye and did not engage in the some of the excessive histrionics previously used by the FBEU. Two Marrickville rescue operators did however briefly attract media attention in March 1991 after they disseminated a memo to ambulance personnel urging them to call either police or ambulance rescue units to calls, rather than fire units. This attracted the opprobrium of senior police and fire commands, as then acting Commander of Police Rescue, Peter Robb told a newspaper reporter:

> 'What was expressed in the memo were the personal views of the authors, and not anyone else, and they have been dealt with. I do not see anything factually wrong in the memo. They just got carried away and it was not for them to express their views.'[325]

A significant event occurred on Wednesday 22 July 1992 – the official opening ceremony for the Police Rescue Squad's new base in the inner-southern city suburb of Zetland. The relocation from Marrickville to Portman Street Zetland had been initiated for financial reasons; a chance to move a number of police units out of various rented premises to one large site owned by the Force. Another reason that came to have an increasing relevance was that Zetland was more centrally located for the Rescue Squad's designated rescue area, which extended from the southern shore of Sydney Harbour through Sydney's Central Business District to Botany Bay (including Sydney's main domestic and international airport), as well as the city's eastern suburbs. A total of $800,000 was spent on works at Zetland, including retrofitting a large Nissen hut-like building that had more floor space than Marrickville to house workshop and equipment storage bays, fridges to store food for the canteen, training rooms, under-cover parking and general office facilities for rescue operators and other police units.

The move to Zetland did not occur without hitches. Initially it had been hoped to complete construction and refurbishment by mid-1991 however the project suffered a number of planning and construction delays. As the delays dragged on, the squad was forced into a temporary arrangement whereby at least one truck and two operators per shift based themselves in a small demountable draftsman's shed placed on a wharf at the Water Police base in the inner city harbourside suburb of Pyrmont. This temporary arrangement was in response to protests from the Fire Brigades that the police had accreditation to conduct rescues in the city but their base was in suburban Marrickville. The interim arrangement was not welcomed by rescue operators: the shed barely fit two people at a time, was freezing in the cold and boiling in the heat, and the operators were not allowed to return to Marrickville during quiet periods to undertake equipment maintenance.[326] Nevertheless, the Pyrmont interlude continued until the squad moved to Zetland in mid-1992, with construction work on the larger police complex not completed until early 1993.

> At Zetland's official opening, Minister Pickering told the gathering: 'The NSW Police Rescue Squad is recognised as the leader in its field throughout the Southern Hemisphere. It is befitting that the level of professionalism and skill displayed by the officers is reflected in this state-of-the-art

accommodation.'[327]

Privately, Pickering had become extremely frustrated with the lack of pace in effecting the devolution process. He especially felt that the SRESB was stalling him.[328] Also, he was experiencing worsening tensions with several officials, particularly senior police. With the appointment of a new chair to the SRESB, Pickering agitated for action. He received advice that the first phase of devolution could be implemented, so on Wednesday 2 September 1992 he announced that he had agreed to the SRESB's recommendation to withdraw accreditation for the Green Valley, Engadine and Blacktown de-cents, to take effect the following week on Monday 7 September 1992. The Frenchs Forest and Pennant Hill units would lose their accreditation on Friday 16 October 1992. This announcement was accompanied with confirmation of a reduction of units in Sydney from 19 to 14 (one police, four ambulance and nine fire).

Less than a week after the Frenchs Forest and Pennant Hill units lost their accreditation, Ted Pickering resigned from all positions of authority within the government. Earlier, on Monday 21 September 1992, Premier John Fahey removed Pickering as Police Minister and assigned him the more junior Justice and Emergency Services portfolio. This transfer was because of an irreconcilable breakdown in relations between the politician and Police Commissioner Tony Lauer. By late 1992 neither man could work with each other and the premier could not terminate the commissioner's employment without the support of a majority of parliamentarians (which he did not have). Pickering lasted a month in the new role before he was forced to resign when it was revealed he had earlier misled parliament about his knowledge of a highly controversial 1991 matter involving the attempted suicide of a teenage youth in police custody. Pickering's successor as Minister for Police was the former Minister for Justice and a retired soldier, Terry Griffiths. He indicated to those gathered at the Police Rescue Squad's 50th Anniversary ball held at Rose Hill on 2 October 1992, broad support for police and a willingness to reconsider recent developments in due course (noting that portfolio responsibility for the SRESB had been retained by Pickering as Justice Minister). Nevertheless, on Thursday 29 October 1992 Griffiths ordered a stop to the further devolution of police teams, pending the outcomes of a review of his predecessor's original decision.[329]

One of the significant policy issues the Force wrestled with during

late 1992 and early 1993 was the question of who would conduct the essential police support taskings previously undertaken by the devolved de-cents. These were the tasks such as forcing entry into locked buildings, recovering bodies and property from non-rescue incidents, dismantling activated house alarms where owners were absent, assisting police at demonstrations, and conducting search and rescue operations. Within a few months it became clear that Zetland did not have the staff or resources to meet all requests from throughout the Sydney Metropolitan Area; only 20 per cent of support requests could be serviced.[330] Zetland's OIC Ken Holmes recommended increasing the Rescue Squad's size by two vehicles and 20 operators. This doubling of the unit's of staff would enable four operators and the two vehicles to be available at any time of the day for operational support work throughout the areas of Sydney previously covered by the five de-cents.[331] The proposal was not acted upon.

This was a torturous period for the women and men of the devolved units. They continued to undertake their general policing and traffic enforcement duties, frustrated at the uncertainty about their futures as rescue operators. Rumours swirled, whispers were heard of every option from convincing the new Minister to overturn Pickering's decision to allowing a partial reinstatement to conduct vertical rescues (as it was widely acknowledged police had the better training and all-round experience in vertical rescue operations), or totally abandoning operational support work altogether. Monthly training sessions for the devolved teams were conducted where possible to maintain core skills however these sessions were difficult to undertake given most (if not all) of their equipment had (in accordance with Ministerial direction) been returned to Zetland for inspection and potential disposal. Vehicles were also recalled to Zetland for refitting and to have the 'rescue' decals removed from them,[332] although the Hino previously used by Engadine was reallocated to Cooma, and Green Valley's Hino was taken to Lismore. Both vehicles were well worn but they were larger and more capable than the Land Cruisers the two small de-cents had been using until that point. Blacktown's Hino never arrived at Zetland, it had been quickly disposed of by an enthusiastic district commander without approval from Holmes.

In March 1993 the Force put forward a proposal to Griffiths to retain the devolved teams but rename them each an Operational

Support Unit (OSU). He agreed and the OSUs commenced operations on Sunday 4 April 1993, but were not officially pronounced operational until Monday 24 May. Vehicles smaller than the Hinos were allocated (generally a Land Cruiser or, in time, a Holden Rodeo utility), the OSUs also received limited amounts of rescue equipment (basic tools, hydraulic kits and stretchers). Eligibility for OSU membership remained restricted to qualified rescue operators. And because their primary duties were general policing, OSU members were often the first emergency personnel to arrive at rescue incidents, as then Frenchs Forest member Stewart Woodward recalled:

> 'It was a real difficult time because the firies were the accredited unit officially ... but we would still roll to the jobs. If we were first there, we started [extrications] and handed over to them [the Fire Brigades] ... It was sort of a difficult time for ... a lot of the old guys that had been doing it for a long time.'[333]

In May 1993 the emergency services portfolio was placed back under the Police Minister. This brought the SRESB and rescue policy directly under Minister Griffiths, who knew that rescue was a complex policy space. He had been lobbied by a range of groups including the services, industrial representatives, community groups and other interested parties, each pressing their views on the best options to pursue. It was advice from the SRESB that troubled him the most however.[334] Earlier, individual assessments were conducted of 361 SES, fire and ambulance operators, and police operators from Zetland. With the exception of the police, the operators were from units scheduled to replace the de-cents identified for devolution.[335] Zetland was the only unit where all operators passed. While some units of firefighters came close, others had almost as many personnel fail as pass. The SES results were worse. This gave the Minister serious pause for thought as to further implementing his predecessor's vision of police devolution.[336]

In June 1993 Griffiths advised the SRESB that the police rescue de-cents in Bathurst, Lismore, Newcastle and Wollongong were to retain their primary accreditation. He also made it clear to the Fire Brigades he supported OSUs conducting police support work in any location in Sydney at the discretion of police command. He subsequently advised the Police Association however that he wanted the 'rescue and police operational support arrangements in Sydney

and the other areas to again settle'[337] before reconsidering whether to return rescue accreditations to the OSUs.[338]

Even though the minister had made his intent clear, the existence of the OSUs was not warmly embraced by elements in the other services. The arrival of OSU personnel at a rescue incident often caused resentment and suspicion. One such incident occurred at West Pymble on Wednesday 28 September 1994. In a freak accident a garbage truck driver lost control of the vehicle's breaks, it overturned at an intersection and crushed several cars, killing two drivers. Attending fire and ambulance rescue crews struggled to extricate the deceased, the on-scene police commander called for the assistance of the Pennant Hills OSU. Although not contrary to the letter of the SERM Act, the episode did not go without complaint.

As time passed the Force struggled to sustain the OSUs. The reasons for this were many. Despite using smaller vehicles and operating less equipment than before, the units still drew on departmental funds in terms of salaries and costs associated with regular training. At the same time the variety and volume of work diminished, partly as the results of changes in Force policy (eg: no longer attending house alarm calls unless burglaries had been proven) or because tasks were taken on by other police units or organisations (eg: catering being undertaken by volunteer organisations). Frustrations on the part of OSU members also played a role; they were highly trained rescue operators but were only called on to undertake mundane tasks such as recovering property or attending traumatically horrific scenes such as recovering badly decomposing bodies. Without even the occasional positive bonus of rescuing people in distress, OSU morale suffered and attrition rates increased. This required additional expenditure to train replacements. Staff attrition was particularly pronounced in the units where district commanders were indifferent towards or openly unsupportive of the OSUs. Attracting new staff proved difficult, especially as applicants preferred to serve at Zetland or at rescue-accredited de-cents.

Proposals raised periodically to lobby the SRESB to have the OSUs re-accredited, or to streamline OSU operations through rationalisation (as per Ken Holmes' 1993 recommendation), failed to gain support of the Force's senior executive.[339] There was a degree of moral support for rescue operators but the senior officers were otherwise focussed throughout the mid-1990s on higher priority strategic matters. These included preparing for the upcoming 2000

Olympic Games and dealing with a surge in drug related crimes across the state. Also critical was managing the fallout from a Royal Commission that found systemic and entrenched corruption within the Force, and the need to institute lasting organisational reforms.[340] There was no organisational appetite for what would be a protracted policy and bitter political dispute for the re-accreditation of OSUs.

In spite of the tumultuous developments during the 1990s, Zetland's rescue operators had to continue mundane taskings such maintaining their equipment. Here, in 1993, Garry Webster (left) and Peter Robb are 'whipping' lashings of manila rope, to prevent the ends of the rope unravelling.

In early 1997 the OSUs were formally disestablished, a move accompanied by a directive within the Force that Zetland was available to respond to any appropriate operational support tasking in the Sydney Metropolitan Area. The attendance of rescue operators from Zetland at an operational support incident outside of their rescue area still attracted complaints (or at least pointed queries) from other rescue services, but not the levels previously encountered.[341] The disestablishment of the OSUs was not unexpected but it was nonetheless another blow to rescue operator morale. Another significant knock came late in the year when the Zetland base itself was almost destroyed by fire.

Tuesday 2 December 1997 was swelteringly hot; over 150 bushfires raged throughout the state with numerous infernos

surrounding Sydney. During the course of the day fires smashed into suburbs to the southwest of Sydney and two volunteer bush firefighters died in a blaze to Sydney's west. Just before 4pm at Zetland, Senior Constables John Williams, Bob Foster and Tony Geddes were in the truck bay undertaking maintenance on equipment and vehicles. After a while, Williams subconsciously registered a whistling noise coming from inside the work and storage room, next to the truck bay. The policeman initially thought it was Peter Robb – renowned within the squad for his whistling prowess. Williams continued to focus on what he was doing but after a minute or so, became curious as to why Robb had not appeared. The rescue operator walked into the storage area to check and was gobsmacked by what he saw – flames licking the ceiling of the welding bay section and spreading to engulf the rest of the warehouse.

After alerting the others, Williams looked in vein for the nearest fire hose but saw it was destroyed – its copper pipes melting in the intense heat. Robb raced down with a fire hose from the front of the building, but it couldn't reach the bay. Rescue operators and other police in nearby sections of the Zetland complex hurriedly brought fire extinguishers, water buckets and sand, to throw against the inferno, others moved vehicles away and retrieved as much equipment as they could carry.

Located no more than 200 metres from the complex was the Alexandria Fire Station however it was deserted, its crew away fighting bushfires. The next nearest fire station was the heart of the city, almost five kilometres away. Those firefighters responded promptly but it nonetheless seemed to take forever, with rescue operators doing what they could to avert a looming disaster. The fire pierced the building's roof and nearby petrol containers were noticeably bulging as the heat turned the contents to vapour – a prelude to explosion that could have taken out the Bomb Squad's magazine that was full of explosives. Fortunately firefighters were able to extinguish the fire soon after their arrival but it was some hours before the scene was declared safe.

Scores of thousands of dollars of equipment was destroyed, including the unit's flood boat. The damage to the building was substantial and expensive to repair. A thorough investigation by scientific police established that the inferno had been caused when a spark from a drop saw used earlier in the day, landed on a small piece of carpet soaked with fuel, on the floor in the adjoining bay.

The carpet didn't catch alight immediately but when it did, it was intense enough to spread rapidly. Through good luck, dedication and bravery by the police, an utter catastrophe for the unit was narrowly averted. The fire could have easily destroyed the majority of the unit's equipment and vehicles, and those belonging to other units in the adjacent buildings. Another fire in an adjacent building in the complex about 18 months later, also destroyed some items of rescue equipment.[342] The losses were replaced through a mix of purchasing new equipment (from insurance payouts) and holding off on the disposal of some older items. For some kit, such as the flood boat, it would be years before it was replaced.

Throughout the 1990s the number of rescue calls remained below the pre-accreditation era levels however the overall workload at Zetland steadily increased. There was a particular growth in the amount of police support calls such as using their special equipment to quickly force entry into locked or fortified houses, to enable detectives to execute search warrants. In addition to their operational duties and the training requirements to maintain their primary rescue accreditation, rescue operators also represented the Force on a number of SRESB technical panels, audit teams and committees, and provided senior instructors to train police and other rescue operators. The SRESB (renamed the State Rescue Board in 1996) also expected Police Rescue to provide technical and specialist rescue expertise to other accredited rescue units at emergencies where the task was beyond the latter's capabilities.

Administratively within the Force, on Sunday 23 June 1991 the Police Rescue Squad was transferred from the State Operations Support Group to the newly created State Protection Group (SPG). SPG's mandate was to provide frontline police with specialised capabilities in high-risk incidents such as sieges, rescues and terrorist attacks. This move was brought about by two controversial shootings involving tactical police from SWOS and the Tactical Response Group (TRG).[343] Establishing the SPG enabled the Force to refresh its approach to tactical policing, with its capabilities divided into four streams – operations, witness security, intelligence and negotiations. Rescue was a fifth stream so the Rescue Squad maintained its separate identity, albeit as part of the SPG. Rescue operators at the de-cents remained attached to their districts (later to be called as Local Area Commands).

In January 1994 Inspector Ken Holmes retired. A foundation

member of the Blue Mountains Police Search and Rescue Group in 1968, Holmes had provided over 30 years of service in the Force, 10 of which were as the OIC/Commander of the Police Rescue Squad at Marrickville and then Zetland. The experienced police officer and rescue operator had been a steadying presence in the squad, which had experienced six OICs in the nine years that followed Ray Tyson's retirement. Holmes' replacement was long-time rescue operator and instructor Garry Smith, who was promoted to the commander's position in June.

By this time the name of the Rescue Squad had been amended as part of broader changes to departmental naming conventions. The term 'Police Rescue Unit' had first been formally used in organisational charts when the SPG was formed but it only gained traction mid-decade when the names of most squads were changed to units. Perhaps unsurprisingly given the history of the Rescue Squad to that point, the old title remained in the vernacular of a generation of rescue operators, police and the general public, and the words 'Police Rescue Squad' remained sewn into the operators' overalls until 2007.

Another notable development for Police Rescue occurred in 1994 when they formally ceased undertaking one of their signature auxiliary functions – the canteen. A task that helped support the welfare of thousands of frontline police for decades, operating the canteen had always been a substantial feat of logistics. An internal review in 1989 found there remained marginal financial benefit in the Rescue Squad continuing with the role. The issue was revisited in 1994 when the state government announced plans to introduce enhanced food serving regulations. Given the now ubiquity of fast food outlets that opened for extended hours throughout the state (which hadn't existed in previous decades) and the establishment of mobile canteens in volunteer agencies that often deployed alongside the police in major operations, it was felt there was no longer a necessity for police to maintain its own catering service. The financial savings realised from no longer performing the task were diverted to other areas and Rescue 5 (the canteen truck) was sold to the VRA. Inspector Smith was able to secure departmental approval to convert the canteen supervisor position into a rescue operator role. The occupant of the position, Senior Constable Neil Turley, completed his basic rescue course in 1994.

THE THREDBO LANDSLIDE

The small alpine resort village of Thredbo is nestled in a steep valley near the highest mountain on mainland Australia. Most of the resort's residential and accommodation blocks are built on the eastern side on the valley, terraced into a mountainside so steep in places that buildings may appear to be only one or two storeys in height from the high side, but are four or five storeys tall on the other. Passing above the eastern settlement near the top of the mountain's ridgeline is the Alpine Way, a bitumen and gravel road that connects the area to the nearby Victorian border.

In the late evening of Wednesday 30 July 1997 the weather at Thredbo was a freezing -11 degrees Celsius yet the night was calm and still. Village life was quieter than expected as visitor numbers were down because of limited snowfalls. Around 11:30pm the silence was broken by a large rumble emanating from above the village, just beneath the Alpine Way. Witnesses later described the noise a like a tornado, loud train or sonic boom – the sound of thousands of tonnes of soil, trees and boulders plummeting towards the valley floor below.

In the landslide's path was the multi-storey Carinya Lodge, a brick, wood and concrete structure that under the pressure of the surging force of soil and debris, corkscrewed to its left and then ripped into two. The cumulating devastation proceeded to destroy a portion of Bobuck Lane, a narrow road laying immediately beneath Carinya. The mass of soil and rubble then obliterated Bimbadeen Lodge, itself nestled under the laneway. The devastation continued its journey before coming to a stop on the slope just above the valley floor.

Stunned local residents and tourists flocked to the scene, the full scope of destruction could only be estimated in a dimly lit freezing winter's night with lingering clouds of dust and leaking gas. Those first to the muddy rubble scrambled over and through the debris in a vain effort to locate survivors; several reported hearing at least some voices crying for help from underneath the large piles of soil, concrete, metal and other debris. The would-be rescuers could not pinpoint or access the victims amidst the sounds of shouting, car alarms and continuing deep grumbling of moving earth and flowing

water.

Local policeman Senior Constable Paul Hoyer assumed responsibility as the Forward Police Commander, working with others to find survivors while bringing some sense to the chaos. Emergency personnel were confronted with omnipresent sounds of large pieces of concrete groaning under the weight of dirt and debris. Senior Constable Warren Denham from Jindabyne arrived at the scene by 12:40am on Thursday morning and took over the Forward Police Commander role; he inspected the site and within minutes made the tough decision to suspend rescue efforts due to the extreme danger. The site was cordoned off and neighbouring buildings evacuated by a team of SPG tactical police who had been in the village for the week undertaking cold climate training.

Fearing that up to 100 people were inside the two lodges at the time of the landslide, police enacted local and district disaster plans, each calling for the establishment of multi-agency emergency coordination. With the size of the rescue task clearly beyond the resources immediately available to the locally accredited (fire) rescue unit, arrangements were made for additional personnel and equipment from multiple services and government agencies. For police this included calling out the Cooma, Goulburn and Wollongong Rescue Units, notifying Zetland, and seeking help from the Search and Rescue Team of the Australian Federal Police based in Canberra.

One of the first police rescue operators from Cooma to arrive in Thredbo around 1:30am was Senior Constable Stewart Woodward. He had been undertaking general duties at the time of the event and heard the initial frantic police radio transmissions from Thredbo. Soon afterwards Woodward obtained permission to deploy the team; he rang everyone and arranged for the team to rendezvous at Jindabyne. Once there, Woodward jumped into the Adaminaby four-wheel drive with Senior Constable Norman Clark and the two raced ahead of the Hino[344] and other vehicles. Approaching the scene the two braced themselves for a grim job. They could sense the gravity of the situation in the police radio transmissions from Thredbo, both in the voices of their colleagues making the calls, and the general chaos that could be heard in the background.

Standing near where Carinya Lodge had been, the Cooma's Police Rescue OIC Senior Constable Col Langdon discussed options with police, ambulance officers and other personnel. Woodward was

tasked to make his way down the icy slope and inspect the area where voices had been initially heard. This area came to be known as the A-Frame because of the amount of debris that had gathered around two concrete slabs, forced together in an inverted wedge shape. Equipped only with a small torch, Woodward tentatively scurried over the debris, tripped in puddles of liquefying soil and navigated his way to the base of the A-Frame itself. He spent over five minutes accessing small cavities, looking for victims and calling out for responses from underneath the debris. Torchlight caught small glimpses of the true scale of damage to the slope but Woodward's focus was on listening for cries of help. The only noises that could be heard were the groaning sounds of earth and rubble settling, running water, and debris popping while under immense pressure. In this intimidating and unpredictable environment the experienced rescuer was scared; he conveyed his assessment to Langdon who had also received preliminary engineering advice indicating significant instability and liquefaction of the site. The OIC ordered a halt to rescue operations pending further review and an expansion of the safety cordon.

As the night drew on more emergency vehicles and crews arrived from further afield; police, fire, ambulance and SES. Plans were developed, reconsidered and modified while nearby buildings were double-checked by engineers for safety. A temporary mortuary was set up at the town's fire station and inquiries launched by police to obtain some precision on the numbers of missing persons. Efforts to establish lighting for the scene using equipment from the Goulburn and federal police rescue trucks were only partially successful. The vehicles with their light towers were parked on Bobuck Lane but the lights were only strong enough to clearly reveal serious cracks in the bitumen and damaged hillside immediately surrounding the roadway. This further influenced police not to enter the scene in numbers until daylight.[345]

As dawn broke the numbers of emergency and government personnel continued to increase. Most arrived by road but some (including several senior Sydney police and Mines Rescue operators) flew to the village in either police or military helicopters. One of the senior police to arrive by PolAir was Inspector Garry Smith from Zetland, who immediately assumed the role of rescue coordinator. Flying over the site he obtained a birds-eye view of the devastation, especially the central area of destruction spanning 50 by 150 metres

in the middle of the built up zone of the eastern valley. On the ground Smith gained an appreciation of the steep gradient when he inspected the damage and began a series of briefings with rescue operators and local police. He was also briefed by engineers and geologists who were examining the site in detail.

During this period some police rescue crews made final preparations to enter the site. Others oversaw the clearing of the Bobuck Lane area to enable access for heavy equipment such as excavators and dump trucks. SES teams worked on clearing pathways into the site, removing loose peripheral debris and sandbagging other areas for support. Elsewhere command centres were being set up, nearby buildings inspected again to ensure people had evacuated, and marshalling operations commenced to organise the constant stream of arriving vehicles and emergency teams. Small teams of police also prepared for the arrival of the families of the victims, desperate to find their loved ones.

About 9:50am Smith convened a rescue briefing session during which he advised the gathering that because the instability of the ground and the amount of rubble, the operation was going to be a marathon effort requiring sustained multi-agency cooperation. In general the rescue and recovery parties would work from the topside of the site and move downwards. The veteran rescue operator, who had been at the Newcastle Workers Club rescue and other collapse situations, insisted that results would not be rushed because the danger to rescuers was too great. He immediately ordered half the rescue cohort to stand-down because he did not want too many people in the site at once, and he recognised that many of the first responders needed to sleep after a full night of travel and operations. Even so, the pace and intensity of operations meant that several police went for well over 40 hours before they were able to get their first fitful (and brief) periods of sleep.

As Smith wrapped up the briefing of rescue personnel, the first groups of police, firefighters and ambulance rescue personnel were authorised to move towards the main debris piles, to use high-tech instruments such as a trapped person locator, fibre optic and thermal imaging cameras. None of these immediately revealed the location of any of the 20 people now identified as missing.[346] Ringing the victim's mobile phones and pagers was also tried, but no ringing could be heard from the surface.

From late morning several multi-agency rescue and recovery

teams entered the site. The size of each team varied, they centred around a small group of rescue operators (police, firefighters, ambulance officers, VRA and/or Mines Rescue), supported by larger groups of firefighters or SES crews who formed human chains to move debris to waiting dump trucks, or pass rescue equipment forward. The teams gingerly worked their way in from the sides, clearing pathways and exploring for access under the huge concrete slabs that had either pancaked downwards onto each other or been violently hurled on top of other items.

For much of Thursday, debris was mostly removed by hand. Stuffs removed included soil, rocks, roofing and domestic items almost flattened by the landslide such as fridges and washing machines. Small excavators and other machines were trialled on the slopes but the vibrations they caused created concerns among NPWS engineers and emergency workers who staffed observation posts higher up the hill to look for signs of further slippage, cracking or collapse. Computer technology was also used to measure the amount of ground movement in key areas above the rescue site; when slippage was detected three loud whistles (later horn blasts) were sounded for everyone to expeditiously evacuate the site. Two temporary evacuations occurred on Friday, one for potential slippage and the other to enable a PolAir helicopter to hover over the site and lower a crewman to check damaged cars in the middle of the rubble for any trapped victims. None were found.[347]

By nightfall one victim had been located and was removed from the site. The man had been the sole person inside Carinya Lodge at the time of collapse. As the coroner would later report:

> 'The force of the impact of the landslide on Carinya can be seen from the fact his body was found at the bottom of the slope below Bimbadeen Lodge'.[348]

The bodies of two other victims had also been located by authorities by Friday evening however the damage and debris was such that it would be many hours before they could be reached and removed.

Progress was excruciatingly slow because of the instability of the ground, the gradient of the slope and the proximity of a large boulder perched near the Alpine Way, threatening to roll onto the site. Penetrating the large concrete slabs that laid over much of the rubble was proving quite difficult with most of the Fire Brigades' heavy duty diamond tip saws freezing in the sub-zero temperatures. Steps were

commenced by rescuers, led by Mines Rescue operators, to tunnel underneath the slabs from the sides of the site. At first progress was only marginally faster than burrowing through the slabs, but in time the recovery of bodies was primarily achieved through tunnelling under the debris rather than removing the debris piece by piece from above.[349]

In a media conference on Friday 1 August 1997 (Day 3) the senior police officer in charge of the site, Superintendent Charlie Sanderson, said that while authorities had not given up all hope, the chances of finding survivors was 'infinitesimally small.'[350] The message was meant to temper hopes of miracles with the realistic assessment of the likelihood of a grim outcome. In the face of increasingly hostile questioning by several journalists about the perceived tardiness of rescue operations, Garry Smith remained resolute:

> 'To rush it would worsen the situation. There has never been a timetable. We will simply work until we are completely satisfied that there are no more victims in there.'[351]

And then, a miracle seemed to occur.

Stuart Diver being carried up the side of the mountain by a human chain of police and other emergency personnel. Photo: NewsPix.

About 5:37am on Saturday 2 August 1997 (Day 4) a firefighter operating a trapped person locator heard a noise from under a concrete slab on the hill above the A-Frame. After rescue operations were paused and quiet was achieved across the site, the firefighter shouted downwards into the rubble. A voice responded – it was ski instructor Mr Stuart Diver who was pinned to what was left of his bed, next to his dead wife. During the collapse Diver's side of the bed ended in a small cavity just metres under the surface, but still beneath three collapsed concrete slabs. This discovery set in train an intense rescue operation that would last for almost 12 hours. It involved a multi-agency team drilling, chiselling, scraping and tunnelling through three partially broken reinforced concrete slabs and other detritus such as crushed wardrobes, carpets and home appliances. Efforts were frustrated by factors including the inability to move only a few millimetres at a time towards Diver (often having to detour around impenetrable objects), the darkness of the cavity, the need to periodically pause to enable a paramedic to assess the man's status, and at one stage, for a temporary evacuation of the site because of a concern of further landslide. Diver's eventual release (64 hours after the landslide) was greeted with loud cheers by hundreds of emergency personnel on the site as well as scores of media and onlookers who had gathered at vantage points on the other side of the valley.[352] Meanwhile, police rescue operators recovered the bodies of two other victims from another section of the site.

For several days the total number of emergency workers and support staff in Thredbo exceeded 400, generally half of whom were on duty at any one time. Of the 400, around half were from State Rescue Board accredited rescue units, including over 30 operators from Police Rescue and 20 from the Australian Federal Police.[353] A challenge for all agencies was accommodating and resting personnel. For NSW police rescue operators, conditions were spartan for several days. A chalet immediately adjacent to the rescue site was secured. With a balcony looking directly onto the site, it was well situated but like other nearby buildings, had lost running water, electricity and gas. Entry to the chalet soon became a challenge to one's senses:

> 'We had to hot-bed which involved waking someone up to get them out of their bed, and then jumping into the bed yourself. The beds were filthy because we had no spare clothes and slept in our muddy overalls. We stunk because we couldn't wash. About all you could do was turn the pillow over and let

> the dribble run away! And when you laid your head down, you couldn't sleep straight away because you were so worked up and could hear what was going on at the site.'[354]

Another building was subsequently secured and by Sunday 3 August 1997 (Day 5), fresh supplies of uniforms, protective equipment and bedding allowed operators to freshen up. Procedures were implemented where dirty and used clothing (particularly those that were stained from leaking sewage and bodily fluids) were destroyed at the end of each shift.[355]

Also by Sunday the initial frantic operational tempo of the operation had stabilised with the implementation of sustainable deployment and rotation practices. Police teams moved from a system of four hours on / four hours off, to a mix of six and 12 hour shifts. This instantly lessened the stresses on bodies and gave rescue operators greater periods of downtime, although few moved far from the site. Rotations of personnel to and from Thredbo were also introduced from Monday 4 August 1997 (Day 6): several rescue operators from Goulburn and Wollongong were rotated home and replaced by operators from Zetland and the Blue Mountains. In the case of Goulburn's Senior Constable Paul Morsanuto, the return trip was delayed when he received a rescue call as he was backing the truck into the police station. Tired and looking forward to a long sleep, Morsanuto was instead urgently redirected to Bungonia Gorge to rescue a stranded Building Antennae Span Earth jumper. The policeman successfully rescued the man with the assistance of VRA, ambulance and other rescue personnel, including police rescue operators from Wollongong who were also driving home from Thredbo in their vehicles.

A team of police rescue operators (left) move gently along a plank resting between two concrete slabs. One of the tunnel entrances can be seen at the end of the plank. The steep gradient of the mountain can be gauged by the angle of the concrete slab with debris below it.

It was difficult to telephone out of Thredbo Village. There were no working landlines near the site, mobile phone ownership at this time was limited and in any case the phone network was overloaded. Unknown to most at the site, Assistant Commissioner (later Commissioner) Ken Moroney took it upon himself to contact the partners or close family of each police rescue operator and provide kind words of appreciation and support. For some partners it was the first confirmation their husbands were at Thredbo, such was the rapid nature of the initial callouts and the intensity of the work that there had not been time to get a message home.

A surreal air descended on the village during the operation. While the massive rescue effort continued apace on the eastern side of the valley, on the western side the ski fields remained open and trading with tourists frolicking in the snow. Off-duty rescuers were encouraged to ski free of charge, as a way to cope with the stress of the situation and the boredom when not on duty – however not everyone was able to 'turn off':

'We'd be skiing and I'd look across to the site and think "I'll be

> over there soon, digging more bodies out." It was a weird situation where you were trying to clear your mind of the terrible things you had seen, but you could see the site clearly as you were skiing down the slope. A few hours later I was back on the site and glancing over to the slopes I had been on.'[356]

Throughout the week memorial services were held in the village's chapel that stood only a short distance from the disaster zone. Each day relatives of the missing victims were escorted through the village by police and taken to the site. In the centre of the valley, at the resort's shops, bars and cafés, all groups mingled and rubbed shoulders. For off-duty police the cafés were where they could escape the immediate noise and tensions of the rescue site, obtain a meal, talk to others and catch a glimpse of television. The generosity police received during these periods from most residents was greatly appreciated.

Attendance at the shops also brought police into direct contact with an enormous media contingent competing with each other to be the first to break a scoop. Much of the early reporting of the event was critical of the police and rescue authorities, yet the standard tactic adopted by reporters was to flatter individual officers, engage them in conversation and then seek sensitive information. The attention was relentless and reached such levels that police were ordered to not wear uniforms when acquiring their meals. This limited movement for those police who arrived on the first day as none had brought warm casual clothing with them.[357]

Each day brought operational challenges for police and emergency services. Most were overcome, often with the help of private industry. A concrete cutting company with lengthy experience in operating in cold climates offered their services and were tremendously successful in breaking up sections of slabs, assisted towards the end with a liquid chemical donated by another company that when poured into concrete, made it more brittle. Chemicals were also used to safely break up large boulders above the site, reducing the risk of further landslips. For safety purposes, large amounts of salt were spread across paths and concrete areas to prevent a build-up of ice. Innovative (but ultimately unsuccessful) efforts to locate victims included using a large mobile X-ray machine designed to see through concrete, and the deployment of a privately owned cadaver dog. Another company loaned eight five-metre helium balloons containing

halogen lights, each valued at $80,000 and capable of producing a brilliant 16,000 watts of light. Tethered to the site at night, the floating balloons produced lighting of a quality far superior to other available

Additional environmental risks facing emergency personnel included leaking underground diesel tanks, sewage spills and gas leaks. These challenges were promptly attended to by utility workers and hazardous materials (HAZMAT) crews. Increasingly stringent hygiene and sanitation measures were also implemented as the risk of disease grew in what was otherwise frigid conditions. This included the destruction of used clothing.

Ultimately the mission was successful due to the patience, dedication and bravery of scores of rescue personnel (government, volunteer and private) who were prepared to place themselves in danger, and the professionalism of support staff. For each rescue operator the psychological and physical challenges often collided in the most confronting of ways. Beneath the slabs was a world of icy darkness, mysterious and frightening sounds, and the presence of constantly running water. For many days the improvised tunnels and voids were barely wide enough to crawl through, and rescuers knew that if an evacuation alarm sounded, they could not get out of the rubble quickly. More than one rescuer thought at times they were at serious risk. No one though wanted to leave before the job was finished.

Hypothermia and mild frostbite were real threats, as was physical exhaustion and the confronting scenes of the victims' bodies when they were finally reached. Each had been at home when disaster struck; most had been in bed. The deformation of bodies was particularly poignant for those rescuers who knew the victims, as several rescue operators from Cooma did. Another psychological challenge related to luck – the luck of being in a search team that was on duty when a victim was extricated. By chance, scores of rescue operators toiled for hours to reach victims only to be forced to hand over to another team at the end of their shift.[358] This inability to obtain 'closure' affected the highly motivated operators in different ways. For several, it (along with other traumas arising from the operation) came to haunt them in later years.

In the early hours of Tuesday 5 August 1997 (Day 7) the nightshift rescue coordinator, Sergeant Mark Powderly from Zetland, noticed that as a group, rescue and recovery parties were becoming

‘understandably complacent as the rescue operation drifted on and they neared exhaustion point.’[359] A tardy evacuation from the site during the evening, combined with other instances of a slackening approach to safety protocols on the part of some rescuers, moved Powderly to stand on the side of the hill above the main area of operations, and give to the gathering what became known as his ‘sermon on the mount’:

> ‘We are becoming sloppy. Our attitudes are getting out of line. We are still committed to a task and we are starting to risk ourselves.’[360]

Police rescue operators from NSW and the Australian Federal Police worked alongside each other for the duration of the operation. In both images the police are working in freezing conditions at the entrance to tunnels under the rubble.

His short speech bemused and befuddled the groups nonetheless it stirred them to refocus efforts on an operation that was now a real

race against the clock. Atrocious weather was predicted to hit Thredbo the following day, Wednesday 6 August (Day 8).

The major stroke of fortune for rescuers at Thredbo had been the absence of fresh snow, rain and wind – any of which would have shut down operations for weeks if not months. Now knowing that the weather would soon turn, SES crews focussed on preparing parts of the site away from the main recovery operations. Large amount of special plastic sheeting with sandbag weights were laid down, their purpose to divert any rains and snow towards specially constructed drains at the side and bottom of the site. But on its own, the plastic would not be enough to enable continued recovery operations in sustained periods of bad weather.

By early Wednesday morning police were now confident there were a total of 19 victims, 13 of whom had been rescued or recovered by mid-morning, then 15 by lunch time. The remaining four were thought to be inside the A-Frame portion of the site, a high-risk area that was becoming more unstable in the noticeably deteriorating weather. Police-only teams were sent in to search in a methodical manner; they were rotated on an hourly basis to ensure they didn't tire. The police were invaluably supported by mines rescue operators who shored up the A-Frame with blocks of wood as the police teams dug, cut and pulled apart the remaining rubble between them and the victims. Noticed by all present in the A-Frame during that evening was the wooden shoring underneath the concrete. It had been packed in such a way that the wood was initially loosely stacked. By midnight the wood stacks were tightly compressed, a sign that the downpour and strongly gusting winds were causing the slabs to move further down the hill. Every gust of wind created a slight pause on the part of rescue operators and the forensic police inside the tunnels, the latter photographing the site and victims for identification and coronial processes.

Around 2am on Thursday 7 August 1997 (Day 9) the last victim was removed from the site and the operation was halted. A 'hot' debrief for police rescue operators was conducted before dawn, during which they were thanked for their efforts and then released to return home. As the rescuers began to make their way from the village, uniformed police and contingents of SES and NPWS personnel remained to provided site security and undertake further shoring work. That evening, snow fell and the site was formally closed down for a few weeks. After then, in Spring, police supervised the clearing

of the site and recovery of property.

In the weeks and months after the operation, multiple reviews and reflections were conducted. The main review was the coronial inquest conducted by State Coroner Derek Hand. In his final report of 29 June 2000 Hand found that the landslide was triggered when a leaking underground water main near the Alpine Way flooded 'marginally stable' land that was 'extremely vulnerable to collapse' from water saturation.[361]

The coroner received submissions from the public and representatives of some of the families of the victims that were critical or at least questioned aspects of the rescue and recovery operation. Topics of concern included the delay in starting the rescue, the clearing of Bobuck Lane prior to commencing operations at the main section of the site, and not targeting the A-Frame area first (where the voices were heard in the landslide's immediate aftermath). Coroner Hand examined the submissions and took extensive witness testimony. In his final report he rejected the criticism – the coroner was satisfied that in each case authorities made correct or reasonable decisions. Overall he found that:

> 'Despite all the criticism and suggestions put forward it is quite clear that because of the extreme danger involved in moving the debris, the rescue and recovery was carried out in a thoroughly professional way and with proper and due regard for the safety of the emergency personnel and those trapped by the debris. The recovery of Stuart Diver alive was most certainly due to the careful and professional manner of the operation.'[362]

Separate to the coronial inquest, each service conducted debriefs and reviews of their operations. For the police there was a general sense of satisfaction at what they achieved in a difficult and protracted operation conducted in a remote location with increasingly hostile weather. Areas identified for improvements included enhanced communications infrastructure, better managing situations of over response, and establishing more nimble logistics support mechanisms.

The proverbial elephant in the room for many was the issue of inter-service relations, particularly between police rescue operators and firefighters. Thredbo was the largest and most protracted joint agency rescue operation since both the Newcastle Earthquake and the devolution of the Sydney de-cents. Significant efforts were made by

key police and firefighters to ensure residual tensions from those earlier events did not produce heated debates and disagreements either during or after the Thredbo operation. Sergeant Manii Verzosa from Wollongong was one to notice an improvement:

> 'It was the only time in my career where all services operated as one. Everybody worked their guts off in unison.'[363]

A major factor contributing to deflecting troubles was a change in the operating philosophy on the part of the Fire Brigades in the years since Newcastle. Because the Brigades had recently embraced urban search and rescue (USAR) tactics, they had moved from a rapid action intervention philosophy to one that better aligned with the police's cautious and measured approach.[364] This is not to say the Thredbo operation was without some instances of friction or tension between personnel from various agencies, but that the instances were managed so that they didn't have a public boilover in the way that occurred after Newcastle.[365]

The Thredbo Landslide was a nationally significant event and a terrible tragedy for the victims and their loved ones. It had a lasting impact for most (if not all) rescue and emergency personnel who attended. For many, the significance of the incident and their role in it was not readily apparent until they had a chance to begin putting events into perspective. For instance, during the relatively short drive from Thredbo to Cooma in the early morning of Thursday 7 August 1997 an exhausted Stewart Woodward struggled to reconcile his thoughts and emotions. He had been one of the first of the Cooma unit to arrive, and one of the last to leave. He had been the first rescue operator to inspect the A-Frame in detail soon after the landslide, and was in the team that worked inside the A-Frame to recover the last two victims – both of whom he had known.

Focused on the task at hand for eight days straight, Woodward had no appreciation of how much the incident had transfixed the nation. On the drive back he was instead thinking about what parts of his experience, if any, he could share with his wife. He also keenly looked forward to reuniting with his six-week-old son. Walking home from the police station, the policeman entered Cooma's main street and was stunned by what he saw:

> 'All the shops were shut but in each window were drawings by children thanking rescuers for what they did at Thredbo. I sat down in the main park for a few minutes and it started to

snow lightly. It was the first time that the true enormity of the event hit me.'[366]

The efforts of police at Thredbo were independently acknowledged when the NSW Police Force was awarded the 1998 Australian Search and Rescue Award from the National Search and Rescue Council. The council is a cooperative body responsible for national search and rescue response arrangements in Australia. It found police efforts in coordination to be of the highest standards. At a ceremony in the Blue Mountains on Thursday 12 November 1998 the award was presented by the Police Minister and accepted on behalf of police by the three senior officers most involved in the coordination of the rescue effort: Chief Superintendent Bruce Johnston, Superintendent Charlie Sanderson and Inspector Garry Smith.

BOMB DISPOSAL OPERATIONS

'The hardest thing to explain to people is what it is like to wear and walk in a 37 kilogram bomb suit: it is so awkward and cumbersome. You can't do it if you have any degree of claustrophobia because you loose so much of your senses and you are under tremendous stress.

Because of the enclosed helmet and thick collar you can't turn your head, nor can you see much. The only thing you can hear is the [suit's] fan pumping air and your breathing getting deeper. And because you are right next to a suspected bomb that could detonate at any moment, your adrenaline levels surge significantly. The more nervous you are, the more you sweat, the more the visor fogs up, and the less you see. Often the only thing you feel is your heart pumping.

By the time you finish the job and take the suit off, you are exhausted, putrid and dehydrated – which is bad enough when you have dealt with a real device, but so many cases are false alarms. It takes a lot out of you both physically and emotionally.'[367]

Bill Morris and Ian Cameron setting off to examine a suspected improvised explosive device that later proved to be a container of picric acid.

The story of how Police Rescue became responsible for bomb

disposal duties in NSW begins in the late 1960s. It is a fascinating tale involving chance, innovation and the realisation that the skills of rescue operators can be applied to other complex tasks. Australia experiences relatively low levels of crimes involving the use of commercial explosives, improvised explosive devices (IEDs) or military munitions – such crimes are not unknown though. On Friday 26 July 1957 Constable Kenneth Coussens, his wife and infant son, were murdered in their sleep when 240 sticks of gelignite, placed inside a metal dairy cream can, destroyed their house in the Far South Coast town of Bega. The offender was later convicted and sentenced to life imprisonment – his motives were revenge for a series of traffic infringements issued by the policeman.

With large agricultural and mining sectors using explosives for legitimate purposes, and surprisingly lax laws relating to the sale and storage of commercial explosives during most of the 20th Century, police in NSW have frequently come across explosives in situations other than the items being used for nefarious purposes. Scenarios include explosives being abandoned, stored incorrectly, or left deteriorating to the extent that the slightest move could risk detonation. In such situations police are responsible for ensuring public safety and for conducting any arising criminal or coronial investigation. And until the early 1990s the responsibility for 'rendering safe' munitions, explosives and IEDs – the process where such items are destroyed, dismantled or otherwise neutralised[368] – was vested in the military.

An early (if not the first) incident where the then NSW Police Rescue Squad came into direct contact with explosives was a bizarre case requiring a search at The Gap on Sunday 5 January 1969. Earlier, detectives had uncovered what was reported to be:

> 'a plot by a gang of hippie drug addicts to blow up the [Sydney's Criminal Investigations Branch] CIB building to eliminate the Drug Squad'.[369]

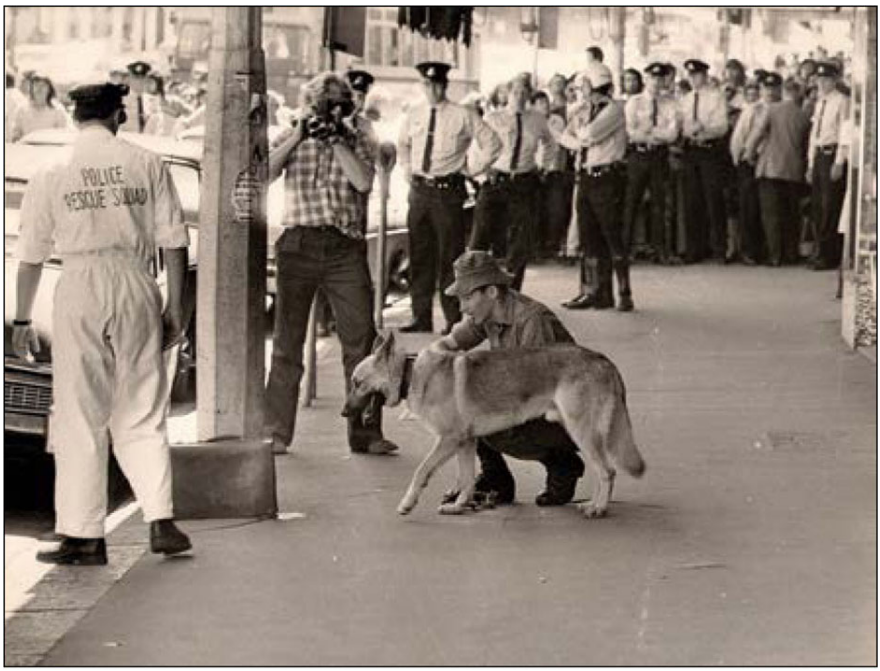
Around 200 sticks of stolen gelignite had been located by detectives in a flat in the Sydney suburb of Kings Cross. More gelignite sticks, detonators and improvised booby traps were located in bushland near Cooma. Acting on information provided by one of the arrested 'hippies', rescue operators searched the cliffs in the vicinity of The Gap, where they found 12 sticks of stolen gelignite and a detonator dangling on a rope attached to the cliff face.[370]

In the late 1960s and early 1970s a spate of crimes involving explosives, IEDs and munitions occurred in NSW. Some of the incidents, such as the killing of a 45-year-old mother in her car through the detonation of an IED in the Sydney suburb of Fivedock on Friday 11 October 1968, were purely criminal in nature.[371] Others had political motivations and were acts of terrorism (though often not called such at the time). The first of these occurred in the early hours of Sunday 1 January 1967 when gelignite was used to destroy part of the Yugoslav Consulate-General's office at Double Bay Sydney. New Years' festivities were being held at the premises at the time of the blast but no one was hurt. On Saturday 16 September 1972 two bombs exploded at the outlets of the Adriatic Travel Agency located in the Haymarket, in inner-Sydney (the first of the bombs injured several people).[372] Also in 1972 a number of letter bombs posted from overseas were detected by Sydney postal authorities. The items were addressed to Israel's embassy in Canberra and to various Sydney Jewish identities.

On Friday 16 March 1973 two IEDs were located in garbage bins in inner-Sydney – one at the Central Railway Station and the other outside a Darlinghurst church. Both devices had been capable of killing or maiming people,[373] they were rendered safe by army bomb technicians. Authorities had been alerted to the location of the devices through anonymous telephone calls made to the Premiers' Department, the motive of the offenders were described by police at the time as being extortion. Later, in April 1973, four devices exploded in various locations in Sydney. The offender for those incidents was identified and arrested but only after three more of his devices exploded in Canberra, including at Parliament House and the British High Commission.[374] Another (unrelated) device destroyed two shops in Sydney on Monday 11 June 1973. In 1974 Commissioner Fred Hanson noted that the incidents were 'causing all responsible people grave concern.'[375]

The Rescue Squad was called to most bomb incidents in Sydney. At the scenes rescue operators assisted detectives and scientific police by establishing barriers to keep crowds away, clearing people from surrounding buildings, searching for evidence and/or other devices and providing floodlighting at night. They also worked alongside military explosives personnel who were called to provide specialist assistance. In the aftermath of the September 1972 Haymarket bombings for instance, over a four-day period rescue operators

searched for evidence inside the damaged shops, escorted and facilitated the movement of army explosives detection dogs and their handlers to various city locations (including to Sydney Airport to search departing planes), and responded with the military and other police to numerous bomb scares and hoaxes.



September 1972 - an army explosives detection dog and handler assisting Arthur Ackroyd in examining a suspicious bag left abandoned on George Street, Sydney, near the site of one of the two explosions that had days earlier rattled the city. To this day Ackroyd has vivid memories of the canine taking it upon itself to urinate over the bag, much to the amusement of the crowd of onlookers and the embarrassment of its handler. No explosives were found in the bag.

Ray Tyson leading Allen Irwin and Dick Lamb from a building, having completed a bomb search.

The utility of the Rescue Squad to police commanders at these crime scenes, and the relationships the men struck up with the military, were such that a handful of rescue operators received military training in basic bomb identification, appraisal and search techniques. A departmental policy issued in 1972 mandated that either the Rescue Squad or the Force's Ballistics Unit should be called to incidents in Sydney where explosives or suspect devices were located, so as a bomb appraisal expert from either unit could examine the device and determine how to best handle it.[376]

The equipment the rescue operators used to conduct appraisals was rudimentary at best; hand-held mirrors, hand tools and fishing lines attached to small hooks.[377] The men had considerable latitude to deal with suspicious devices and on more than one occasion, munitions or explosives not posing an imminent threat were taken by the Rescue Squad to the military's Victoria Barracks in Paddington, or to the Holsworthy Base in Western Sydney. There, ammunition technical officers could render the item safe.[378] Available statistics give an insight into the bomb appraisal workload for the squad during the early-to-mid-1970s: 50 bomb threat incidents and

explosions in 1972, 44 in 1973 and 20 in 1974.[379] The majority of these were false alarms or hoax calls. Others were instances where a venue had to be 'swept' for IEDs before a major event, such as in October 1973 when rescue operators worked for four days straight in the lead-up to and during the official opening ceremony at the Sydney Opera House. This included the operators sleeping at the building overnight.

While the number of explosives incidents (including hoaxes) fluctuated from year to year, and declined for a time in the mid-1970s, the problem did not disappear. The trend, combined with a worsening terrorist problem in several overseas nations, had not gone unnoticed within the higher echelons of the various Australian police forces and the military. Agreement was reached as early as 1971 for selected police officers from all forces to receive bomb technician training from the army. The military would retain lead responsibility for physically rendering safe an IED, munitions or explosives, but police would be able to develop their skills and expertise to undertake all facets of bomb technician duties such as examination, assessment and preparations for render safe, short of the final step of actually 'pressing the button' or 'cutting the wires'. Over time, it would be up to each police force to determine if it wanted to take on render safe responsibility.

The first Police Explosive Ordinance Disposal Course was conducted from Tuesday 17 August to Tuesday 14 September 1971 at the Royal Australian Army Ordinance Corps facility at the Bandiana Army Base, Victoria. Students were given intensive theoretical and practical training in identification and destruction techniques. A course requirement included students designing and constructing IEDs, and then rendering safe other devices. The two NSW Police Force officers on the course were both from the Ballistics Unit of the Force's Scientific Investigation Section, then based in the Criminal Investigations Branch building in Surry Hills.

At this time the Ballistics Unit consisted of a small number of police trained and experienced in the analysis of firearms and ammunition, and the technical evaluation of the scenes of serious crime where firearms had been used. The selection of ballistics officers and not rescue operators to become bomb technicians was a deliberate choice by senior police – a conscious decision to vest bomb response expertise within the Scientific Investigation Section of the Force, whose teams used the same or similar technical equipment

critical for bomb appraisal duties (eg: fluoroscopes and X-ray devices). Police archives indicate that the Ballistics Unit attended an explosives incident for the first time in 1958 (at Williamstown, near Newcastle) and by the 1970s it was also responsible for coordinating the Force's Emergency Squad – a tactical policing body of detectives from various squads, trained in the use of rifles and associated weaponry, called to attend and resolve high risk sieges and similar incidents. The official rationale for having the Ballistics Unit formally take on bomb technician duties has become lost in time however the ironic explanation since given with a tinge of pride (and probably a large degree of truth) by former bomb technicians from the era, is that the senior officers felt that both guns and bombs go 'bang'.

By the end of the 1970s all Ballistics Unit members were qualified bomb technicians, having completed the military provided training course and obtained civilian explosives handling qualifications (a powdermans' course).[380] Additional police from other scientific teams, such as crime scene examiners, also began to be trained. Positions on training courses were highly sought after and the extra police increased the Force's ability to respond to incidents involving commercial explosives or IEDs, particularly in rural locations where a number of crime scene examiners were based. The examiners could provide an initial response and determine whether police and military technicians were required from Sydney.

The bomb response equipment available in this era was limited in nature; a small number of armoured bomb suits (each suit including fully encapsulated helmet weighing in excess of 30 kilograms), sets of lighter weight reconnaissance clothing (regular helmet with a visor and light body armour), along with portable (but heavy to carry) wet-film X-ray scanners and fluoroscopes to examine suspect devices in-situ. A trailer was modified to carry the larger X-ray machines. Each bomb technician also assembled a personalised tool kit of hand tools to assist them in inspecting devices.

The number of serious bombing incidents declined somewhat in the late 1970s and the early 1980s, however several of the incidents that did occur achieved prominent attention. This was particularly the case with acts of terrorism such as the bombing outside Sydney's Hilton Hotel on Monday 13 February 1978 and the bombing of both Israel's consulate office in Sydney and the Jewish Hakoah Club at Bondi, on Thursday 23 December 1982. Criminal acts from the era included a series bombing incidents targeting the Family Court and

its judicial officers between 1980 and 1985, and the bombings (and bomb threats) made against Woolworths supermarkets in late 1980 and early 1981.

A key intergovernmental policy response to the growing threat of terrorism in Australia was the formation of the Standing Advisory Committee on Protection Against Violence (SACPAV). This group of Commonwealth and State representatives established national arrangements and agreements to respond to threats or acts of politically motivated violence. Formed in the wake of the Hilton bombing in 1978, over time, SACPAV came to play a central role in standardising the training and equipment used by police and military teams in areas such as tactical operations and bomb disposal. In 1989 SACPAV funded the acquisition of an Echidna robot for each Australian police force. Australian designed and manufactured, the Echidna is a slow moving tracked wheeled machine operated remotely by a technician using controls and a television monitor, connected by coaxial cable to the robot and its camera. Painted yellow and weighing around 240 kilograms, Echidna's most notable feature is a large extendable arm with fittings for items such as bolt cutters, clamps, a shotgun and Remote Activated Kinetic Energy Disruptors (RAKED). The latter are compact water cannon-like devices designed to detonate in close proximity to an IED, with the jet of water (hopefully) disintegrating the IED's circuitry before it explodes.

An Echidna with an extension boom searching underneath a car.

The acquisition of Echidna was the most significant technical advancement of the era for bomb disposal operations. In the right circumstances the Echidna could undertake reconnaissance and render safe procedures without the need for a bomb technician having to approach the IED, munitions or explosive more than once (to appraise and scan it with an X-ray). For the NSW Police Force, the Echidna proved its worth in another type of dangerous environment – its first operational mission was to assist in the prevention of a radioactive disaster.

On Saturday 6 January 1990 police received an urgent telephone call from a research facility facing a crisis. A mechanical malfunction prevented scientists from remotely lowering a small amount of highly radioactive cobalt into its storage chamber, a water filled stainless steel tube buried into the floor of a concrete and steel reinforced room nicknamed 'the cave'. The cobalt was used to irradiate specimens, however on this occasion the chamber's lid prematurely shut and became jammed with the cobalt above ground level. The level of radiation emanating from the cobalt was such that it could

prove fatal to anyone attempting to enter the room.

In consultation with the facility's scientists and engineers, Ballistics Unit members hatched a plan in which their new Echidna would enter the cave to pry open the lid. To prepare for the mission, Constable First Class Wayne Hoffman hurriedly fashioned an improvised metal blade from scrap metal stored in the unit's Ford F-250 truck.[381] Hoffman affixed the blade to the robot's arm, he then set up his control panel and monitor in a room adjacent to the entrance. It took over four hours for Hoffman to deftly steer the Echidna through the safety doors, along two narrow passageways and then into the main area of the cave. Slow-motion manoeuvring was essential to avoid the robot becoming permanently wedged or trapped. Once there the Echidna was positioned next to the chamber, its arm extended to force the lid open. Anticipation turned to anguish as the blade proved ineffective. Meanwhile the robot's camera began to malfunction due to the incessant bombardment of radiation.

Facing the stark realisation of mission failure, and the possibility that the cave (with the Echidna in it) could be closed down and buried in concrete forever, Hoffman implemented an alternative plan – driving the robot backwards and forwards over the closed lid with a view to breaking it open. For over an hour, and with the robot's camera nearly destroyed from radiation, the constable drove virtually blind – continually swivelling and pivoting the Echidna over the lid until it eventually broke away. This allowed the cobalt to be lowered into the water, instantly reducing radiation levels. Once the scientists and engineers entered the cave to commence their repairs of the chamber the police reclaimed their Echidna. This was the first time a police robot had been used to recover radioactive material and it demonstrated to the bomb technicians the versatility of their Echidna.

By the early 1990s the NSW Police Force was the only Australian police agency to not have formed a dedicated bomb squad, and one of the few that still called on the military to conduct render safe actions. Force command was generally satisfied to continue the long standing relationship with the military and there was no suggestion or discussion that bomb disposal work should fall under the remit of the Police Rescue Squad – itself focussed on the impacts of the dramatic events unfolding in regards to rescue policy in the state. Two significant developments in 1993 however, created the circumstances that subsequently led to a 1998 decision to incorporate

the bomb disposal and rescue functions. Both developments originated from decisions made not within the Force, but outside of it.

The first was the 1993 decision by the military to cease its render safe role at incidents involving IEDs and commercial explosives (but not military munitions). Adopting the view that the making and/or placing of a device in itself was not an act of war, the military stated such incidents should be dealt with in the first instance by civilian authorities. This position was welcomed by the majority of police bomb technicians in NSW, frustrated or at least perplexed by the long-standing protocol where they had to defer to the military for the final step of a render safe operation. Truth be known, by this stage police bomb technicians often ignored the protocol and conducted render safe procedures themselves. Such actions were usually with the tacit consent of military technicians and senior officers in both organisations who tended to turn a blind eye provided the operations were conducted safely. The 1993 notification of a changed position by the military was a fait accompli for the police, now forced to rethink their approach to bomb disposal operations. A decision was promptly taken to establish a small full-time unit of four technicians with part-time technicians in support, to operate as part of the Force's Technical Support Group (the new name for the Scientific Investigations Section).

Volunteering to lead the newly titled Bomb Response Team was Detective (Technical) Sergeant Ray Constable from the Ballistics Unit. An electrician by trade specialising in alarm systems, Constable had worked in ballistics for over a decade and had qualified as a bomb technician in 1983. He enjoyed bomb disposal work and felt it was time to leave ballistics duties, an otherwise enjoyable job except for the frequent requirement to attend the scenes of gruesome murders and shootings:

> 'I don't know whether I went out of the pan and into the fire, in that I moved from attending homicides to attending incidents where I could have been blown up! I took the view that, provided we did everything by the book, and given that we were well trained and competent, we were likely to survive.'[382]

The three other men who constituted the Bomb Response Team were each volunteers; Constables Jim Bartlett and Terry Shepherd from the

Ballistics Unit and Constable Gary Simpson, a crime scenes examiner based in Bass Hill, Sydney.

The team came together in late 1993 and had quite a task in front of them. The formal transition to the new arrangements were scheduled for 1 July 1994 and in the lead-up additional equipment had to be acquired, a base established, governance written and standard operating procedures finalised. It was a daunting task and rapid progress was made. A demountable building and explosives armouries were acquired and placed inside the police complex at Zetland, new bomb suits procured and research commenced on even newer equipment. A large Mercedes truck to store the Echidna and equipment had been used by bomb technicians for some years,[383] it was kept but two Mitsubishi Starwagon vans were added to increase mobility. A standardised uniform was agreed upon – regular blue marked overalls for routine duties and charcoal grey overalls with fire resistant material weaved into them, for when the technicians responded to actual incidents. Interagency agreements were also drafted and signed, intra-service protocols and guidelines were prepared, endorsed and disseminated.

Amidst this hectic period of planning for the future, Ray Constable and his team continued to attend callouts, along with the part-time technicians where required. A significant bomb scare occurred in the early afternoon on Monday 8 November 1993 when a suspicious box was discovered by a security guard in a bus shelter outside of the Queen Victoria Building, a shopping mall on one of the busiest streets near Sydney's Town Hall. The guard opened the box and saw what appeared to be a timer with wires connected to two large metal cylinders. Once police were called, traffic was diverted with the surrounding streets and buildings evacuated.

Upon arrival, police bomb technicians set to work to scan and examine the device in detail. Terry Shepherd donned the bomb suit with enclosed helmet and approached the shelter with an X-ray machine to scan the box. On the way the almost absurdly comical occurred, when a building janitor walked from a side door directly onto the street. For some reason the man had not been evacuated and he was apparently unaware what was occurring. The janitor now found himself in front of a policeman walking slowly in a 35-plus kilogram bulky suit of green armour, unable to verbally communicate because of the fastened helmet, and carrying something clearly serious in nature. Startled with what was in front of him, and only

then realising the street was deserted, with police cars and crowds in the distance, the janitor quickly turned around and raced back into the building.

X-rays of the suspicious box indicated a likely IED and police and military technicians resolved to render it safe by shooting it with a shotgun. The Echidna was brought into action however it broke down before reaching the bus shelter. The military's Echidna was then brought in as a backup and the suspect device was disintegrated in the blast. The operation had taken five hours to complete and had severely disrupted city life at the beginning of the Christmas shopping season. After the operation, examination of the remnants of the box revealed the device to have been a carefully crafted and elaborate hoax (no explosives or gunpowder had been loaded into the cylinders). Investigations unfortunately failed to identify the offenders.

The Force formally took on responsibilities for render safe actions in NSW on Friday 1 July 1994. A year later the name of the Bomb Response Team was changed to the Bomb Disposal Section, part of a renamed Physical Evidence Section within the Force's Forensic Services Group (FSG). The four members of the team were mostly rostered to work weekdays but at least two members had to be ready in case of call outs at any time of the day. To meet this requirement the men relied on the assistance of the qualified technicians attached to the ballistics and crime scenes teams throughout the state. The bomb technician qualification was highly sought after within the forensics fraternity, particularly among crime scene examiners, as it gave them a unique skill that was in high demand.

Bomb technicians (left to right) Andrew Gross, Peter Muscio, Kevin Sullivan and Paul Smith during a training course in 1996.

The second of the two significant developments in 1993 to shape the future of bomb disposal operations in NSW was the International Olympic Committee's decision on Friday 24 September to award Sydney the hosting rights for the 2000 Summer Olympic Games.[384] Unrealised amidst the general jubilation that swept Australia in the immediate aftermath of the announcement was the enormity of the task of hosting the Games. This included providing comprehensive security at over 25 separate sporting venues, key landmarks, transport routes and infrastructure locations, as well as at accommodation venues for both athletes and visiting dignitaries. And the organisation with the responsibility for providing that security was the NSW Police Force.

The scope and the scale of preparing for the Olympics soon began to be realised with security planning and preparations coming to consume a fair portion of the Force's organisational capacity. Concerns about possible terrorist acts at the Games were dramatically heightened when on Saturday 27 July 1996 an IED exploded in a park in the American city of Atlanta, during that city's hosting of the 1996 Olympics. Among Australia's official delegation at Atlanta at the time to examine security operations was Ray Constable. What he saw of American bomb response protocols and procedures reinforced

the sergeant's long-standing view that the numbers of bomb technicians and appraisal officers in NSW would have to increase substantially.

By the time of the Atlanta Games, Constable had already been lobbying for extra police just to meet routine business requirements, let alone for the Olympics. Four technicians were insufficient to maintain minimum staffing for sustained periods, and relying on the availability of part-time technicians to augment full-time staff was becoming more problematic due to competing work priorities. Constable's observations of Atlanta's preparations and his arguments for extra personnel contributed to an FSG decision to conduct an in house review, headed by Detective Chief Inspector Ron Millingen, the commander of the FSG's Physical Evidence Specialist Support Branch.

The 'Millingen Review' was delivered to the senior executive in March 1997. It was critical of the overall resourcing allocated to bomb operations. Existing levels were insufficient to enable Constable's team to meet their obligations particularly in the areas of training and intelligence gathering. The size of the team needed to be increased from four to 14 full-time personnel for day-to-day duties. An additional nine staff were needed to solely organise training and preparations for the Olympics. There needed to be 41 bomb technicians and 332 bomb appraisal officers by 2000 yet in 1997 the Force had fewer than 30 bomb technicians (most part-time) and only a handful of bomb appraisal officers.[385] Other recommendations in the report included better accommodation,[386] additional equipment, and the introduction of psychological assessment and monitoring for all technicians.

The report forced senior commanders to reflect on the role and place of the Bomb Disposal Section. They immediately agreed to one of Millingen's key recommendations that given the unit provided specialist services throughout the state in high-risk situations, it would be more logical to place it within the State Protection Group (SPG). Although not material in the decision-making process itself, a transfer would also bring the Force into line with other Australian police agencies that had their bomb disposal units either part of, or at least under the administrative control of, tactical commands.

The transfer of the Bomb Disposal Section to the SPG in 1997 did not immediately address the issues of obtaining additional capability and staff. SPG's commander, Superintendent Norm Hazzard, strongly admired the skills of bomb technicians and sympathised with the

arguments for more staff. It would be extremely unlikely though that he would be able mount a persuasive argument to obtain extra personnel from outside of his command because of the competing needs of other areas. The superintendent was also unconvinced about the viability of continuing to call on FSG personnel to undertake bomb disposal operations. The part-time technicians themselves were enthusiastic about the work they undertook but they were in very high demand for their forensic skills, and their workloads were increasing.

At the same time Hazzard had been pondering the future of the Police Rescue Unit, itself experiencing another period of uncertainty as elements of the Force and Fire Brigades questioned the continuing existence of it and the de-cents.[387] The number of rescue incidents attended by Zetland was stagnant if not in gradual decline, in large part because the rescue accreditation system limited the unit's area of operations to central and eastern Sydney. Despite this, Hazzard believed the team's true utility was how they brought their skills to operational support work, 24-hours a day, seven days a week. His observations were that rescue operators were well trained and their technical skills were (in a general sense) complementary to those of his full-time bomb technicians.

The SPG commander seized on the idea to amalgamate the two units with members being cross trained as both rescue operators and bomb technicians. Having (in time) over 30 such full-time personnel seemed the best way to enhance the organisation's bomb response capacity and to provide rescue operators with another unique capability, one that was not undertaken by any other organisation in NSW. Over a number of weeks Hazzard worked on refining the proposal, using the advice and input from a small number of experienced staff including rescue's commander, Garry Smith. With the support of the Force's senior executive, Hazzard briefed the teams and their union, and then implemented the plan. In 1998 the Rescue and Bomb Disposal Unit (RBDU) came into being.[388]

The demountable shed within the Zetland complex occupied by the Bomb Disposal Section. It was a snug fit for the squad of four bomb technicians and their kit, and it had no amenities.

The RESCUE AND BOMB DISPOSAL UNIT

Logistically, RBDU's creation was relatively straightforward. Both teams were housed near each other within the Zetland complex; staff knew one another either through work or social gatherings. Within a short period of time the bomb technicians moved their equipment to the main building. Space was cleared by relocating the unit's small museum to the former bomb section's now empty demountable. The planning of training programs for each cohort was promptly arranged – the four bomb technicians were placed on subsequent basic rescue operator courses, and two RBDU-only bomb technician courses were conducted at Bandiana. Relevant personal-issue equipment and uniforms[389] were ordered and distributed as required.

Paul Smith (left) assisting John Williams at a body recovery incident in late 1998. Smith (a bomb technician) is in blue overalls as he had yet to complete a rescue operators course.

Managing cultural aspects of the integration were far more

challenging. The merger of two teams with similar but distinctly different cultures, in a fashion that suggested to some a take-over by Police Rescue, gave rise to some tensions and uncertainty. Hazzard and Smith had expected a degree of workplace resistance to the changes; they had briefed all their staff on the need for, and organisational benefits of, the amalgamation and cross training. The policy position put forward was that all future members joining RBDU would have to be both rescue operators and bomb technicians. Existing rescue operators were given the option to not undertake bomb technician training if they held genuine concerns about the potential risks. As Hazzard expected, most immediately agreed to undertake the training and others came to change their minds in time when through firsthand observation, they gained a better understanding of the nature of bomb disposal work.[390] By the early 2000s integration was fully achieved and it was not uncommon for rescue operators to lead bomb disposal operations, and bomb technicians to lead at rescue scenes.

Two RBDU-only courses at Bandiana held in July and August 1998 saw 15 rescue operators qualify as bomb technicians. Before the course many of the members had been apprehensive of what lay ahead – the role of bomb technician work being somewhat mythologised within society. They found a course that was intense, challenging, stressful but enjoyable. For rescue operator John Williams, one of the most vivid memories was from before the course started, where the police were required to design and build (simulated) IEDs to take to Bandiana. He went shopping at a local electronics store:

> 'I wanted some mercury tilt switches and I wanted some light sensitive switches and so on and so forth, and this bloke said "what to you want all this for?" I said "Ah, I'm making some bombs." So, he said "OK, is there anything else you need?"'[391]

In their training, and later back at Zetland, the newly qualified bomb technicians utilised the growing stocks of bomb disposal related equipment acquired in preparation for the Olympics. This included two Cyclops robots, designed in the United Kingdom and purchased through SACPAV. Narrow tracked wheeled devices weighing around 30 kilograms each (in comparison to the 240 kilogram Echidna), the robots could traverse narrow passages such as the aisles of commercial aircraft, and were capable of raising their camera

equipped arms high up to open and inspect overhead compartments. Unlike the Echidna, the new robots were controlled wirelessly (a fibre optic cable could be connected if needed), and could easily ascend and descend stairs. Being wirelessly controlled meant that Cyclops could be driven backwards without risking fouling itself in the control cable, as often happened with Echidna.

Cyclops was small and nimble but it did have some marked limitations. Its thin arm could not readily support the shotguns and RAKED units used by Australian police and the robot's weight worked against it in some situations. This was graphically demonstrated at a domestic siege that started on Monday 23 June 1997, where for 17 hours an armed man held a family hostage in a suburban house at Pendle Hill in western Sydney. Several times during the event the man shot at police. During a late-night lull, police attempted to peer inside the house using the Cyclops' camera. The offender noticed the camera at the front window, he raced outside in a rage, picked up and threw the robot as far as he could before returning inside. Bomb technicians Senior Constables Paul Smith and Jim Bartlett had to surreptitiously recover the Cyclops and were stumped at how they were going to repair its badly damaged and unserviceable arm. Fortunately, a local police officer had a contact who owned a nearby vehicle repair business. After a quick midnight phone-call, Smith and Bartlett took Cyclops to the workshop where urgent repair work was undertaken by the business owner. The jury-rigged repairs enabled the robot to again be deployed at the siege, which was eventually resolved when tactical police (supported by a police canine) subdued and arrested the gunman.

As the Olympics approached RBDU personnel delivered a series of Bomb Appraisal Technician (BAT) training courses to over 150 police (including several de-cent rescue operators)[392] at a disused incinerator complex in Zetland. RBDU members also participated in a series of training and familiarisation exercises with other police teams, and multi-agency exercises with emergency services and the military. Arrangements were made for small numbers of FSG, interstate police and military bomb technicians to work alongside RBDU during the Games. One of the important initiatives undertaken by RBDU bomb technicians in the lead-up period was conducting a series of explosives familiarisation sessions for senior officers and those who would undertake command roles at the various Games venues. On more than one occasion, these live demonstrations of the

actual destructive capabilities of explosives, led to a rethink by venue commanders of the procedures and tactics their personnel would use in detecting and responding to suspicious devices.

By the time of RBDU's creation the threat of a bombing attack was regarded as the highest security risk to the Olympics.[393] Security planners needed an effective bomb management framework to enable a robust search and response capability that would cause minimal inconvenience to the hundreds of thousands of people expected to attend the games. To lead the effort to create this framework, Garry Smith was selected at short-notice in mid-1999 for the position of Senior Bomb Management Coordinator. A rescue operator and trainer since the late 1970s and early 1980s, a veteran of the Thredbo and Newcastle operations, and OIC of the rescue squad (and later-RBDU) since 1994, Smith brought a wealth of experience in undertaking and managing interagency emergency response operations. This background enabled him to lead his team in negotiating with senior police and officials from other agencies and departments, while also developing the necessary planning documentation.[394]

The operational model implemented by Smith and his team saw Games venues searched daily by (predominantly) police bomb searchers before being 'locked down' with security teams (police or private security) taking responsibility for ongoing security and crowd management. If at any stage a suspicious item was located either at a venue or on a person, a BAT was called for – scores of whom were rostered at venues and able to respond swiftly. These police would scan the suspicious item with their tools and X-ray units in a (hopefully) low-key fashion that ensured public safety in a way that caused minimal disruption to the crowds. Teams of bomb technicians were also widely dispersed at Games venues to respond only to those locations where a BAT determined an item required further examination and/or rendering safe. This model was simple in concept but required extensive planning and testing. It was foremost in everyone's minds that the eyes of the world would be on Sydney so their actions would be closely scrutinised – therefore the system needed to be as seamless and streamlined as possible.

From a law enforcement perspective, the Olympics (followed by the Paralympics) proved to be pleasingly anti-climactic – there were no significant security incidents at any Olympics venue and general crime levels were less than authorities had anticipated.[395] There were nonetheless a number of calls for police attendance – for 'the

downside of the increased awareness of bomb management issues is that it encouraged the sometimes overzealous reporting of unattended items as potential security risks'.[396] The BATs were kept busy attending such reports however few required the attendance of bomb technicians. One exception was a case where RBDU members were called to non- Olympics location in Sydney to locate and recover a small amount of commercial explosives, secreted by a man who boasted he would use them albeit in an unspecified fashion. That aside, the lasting Olympics memories for most bomb technicians was working long but enjoyable hours and experiencing the festive spirit that permeated the city.

Post-Olympics, the Force reassessed how it was structured to undertake and support bomb disposal operations. Recognising the need to focus on their core areas, and noting that RBDU now had almost 30 bomb technicians, FSG ceased providing staff to undertake bomb technician duties. Within RBDU discussions continued as to the best way to deploy staff for bomb incidents – debate centred over whether some members could focus almost exclusively on bomb technician duties, and even whether it would be better to revert the a pre-1998 position of having separate bomb and rescue units. Concurrent to these discussions, de-cents sought more training and additional or updated scanning equipment, to enable them to continue providing BAT services in rural areas.

While the so-called 9/11 attacks in the USA in 2001 dramatically challenged western society's understanding of the threat posed by Islamic fundamentalism, it was the detonation of two bombs at the Indonesian resort district of Kuta, Bali on Saturday 12 October 2002 that shocked Australian attitudes towards the risk of terrorism against Australia and its citizens. Of the 202 people murdered in the blasts, 88 were Australian. Over 100 more Australians were injured. In the wake of the carnage, and against the backdrop of Australia's active involvement in controversial geostrategic events such as the invasion of Iraq in 2003 and deployment of military (and later police) forces to Afghanistan, Australian governments reassessed the risk of terrorism in Australia and the need to ensure adequate resourcing of their counter terrorism units.

At an organisational level, the NSW Police Force restructured itself with the creation of a Counter Terrorism Coordination Command that incorporated certain investigations, intelligence and protection groups (including the SPG) under the single command of

the newly appointed Assistant Commissioner Norm Hazzard. For SPG teams this administrative realignment was accompanied by extra funding to enhance capabilities – RBDU alone received over $2 million to purchase state-of-the-art bomb disposal and associated equipment. New items included bomb suits with the latest armour and built-in radio headsets, chemical and radiological suits, monitoring devices for chemical, radiological and explosives materials, and X-ray devices which could wirelessly transmit the results of scans, thereby removing the need to use wet film scanners

The other significant enhancement of RBDU capability was the replacement of the Echidna and Cyclops robots with a mix of small, medium and large robots – the largest called tEODor (an abbreviation for telerob Explosive Ordnance Disposal and observation robot). Weighing 380 kilograms and costing $600,000, tEODor was designed in Germany and represented a larger yet more agile and capable version of the Echidna, wirelessly controlled and able to haul 500 kilograms of weight. Also acquired with the injection of funding was a bespoke Total Containment Vessel (TCV). Similar in appearance to a cement mixer on a trailer, the RBDU's TCV is a spherical storage chamber made from titanium and other toughened metals, into which explosives and chemicals up to the size of a travel suitcase can be placed and then rendered safe, either through controlled explosion or a dousing in chemically treated water. Although differing styles of TCVs had been manufactured for years, this unit was built by an American company using RBDU's specifications that blended the best elements of other designs along with innovative user-operator features.

A tEODor robot at the rear of an RBDU bomb truck during a period of maintenance.

SOME BOMB RESPONSE INCIDENTS

RBDU attended 2392 rescue and 192 bomb response incidents in Financial Year 1999/2000.[397] This percentage of bomb incidents in comparison to rescue and other support calls is fairly consistent each year. Most bomb calls are routine in nature and are dealt with as discretely as possible. Others end almost surreally, such as one call to a farm shed in Mudgee when police were faced with badly decomposing gelignite stored in paint cans atop a workbench. The liquefying chemicals had seeped through the metal and impregnated the bench with highly unstable crystals. Faced with a potentially explosive workbench that could not be moved, bomb technicians obtained the permission of the property's owners to set the entire shed alight – the fiery outcome proving the safest option.

In mid-2001 police were provided reliable information that a man, later described in court as an 'eccentric loner,'[398] routinely wandered about the rural western town of Coonabarabran carrying concealed handguns, and wearing a concealed vest that held an IED. Discrete police inquiries confirmed the information and established that the man had also rigged a series of booby traps on his rural property, where he led a hermit-like lifestyle. He did not want to use the guns or explosives to attack anyone per-se – they were for self-defence as he had previously been a victim of a violent crime and felt vulnerable. No one would take his weapons from him, he said, if they did he would detonate the IED.

Detectives, tactical police and the RBDU formed *Operation Terrall* with the goal to safely disarm the man, place him before the courts and secure all firearms and explosives. Over an extended period numerous police (including RBDU personnel) were deployed on a rotational basis to Coonabarabran, where they discretely conducted surveillance and devised options. A judgement was formed that the man could act irrationally if he felt threatened, and the explosive vest made physically approaching him a highly dangerous proposition. Moments of tension were common as police tried to avoid tipping off both the man and other locals as to their intentions – an extremely difficult task in a small country town. On one occasion the team were inside Coonabarabran's police station discussing contingencies, when the man himself walked into the station's front counter area, clearly

upset. Fearing they had been sprung, the officers prepared for a showdown however the man instead wanted to report the death of his beloved pet dog.

Eventually an arrest plan was finalised and implemented on Friday 12 October 2001. As the man rode his homemade motorised bicycle along a dirt road, he was suddenly confronted by heavily armed police positioned in trenches that had been dug the previous night. Other police were in a former military armoured vehicle that had been hired for the operation. In addition to digging the trenches, police had laid barbed wire along both sides of the road to hinder any attempt by the man to run into the bush. After several tense moments of negotiations, the man surrendered his weapons and explosives, and was bundled into a waiting police van. RBDU operators Ray Constable and Peter Ray then moved in to photograph the vest and render the pipe bomb safe by detonating it with a cutting charge.

About a week after the arrest, RBDU members Paul Smith, Robert 'Rob' Golding and Norman 'Norm' Richards were tasked to render safe the offender's property. On their way to Coonabarabran the trio stopped at Bathurst and interviewed the offender who was being held in remand. The man was surprisingly cooperative in describing the location and composition of a number of items on the property. The information, though not totally trusted, nevertheless helped prepare the bomb technicians for the task ahead. Over a two-day period the three operators, along with detectives and investigators, carefully searched and cleared the property.

The site included a ramshackle collection of housing, being a caravan, solar panels, temporary huts and a car mounted on bricks to power an array of car batteries. Among the immaculately maintained industrial machinery and dishevelled personal spaces in the huts and caravan, police located a number of items of interest. These included explosives, a partially built aircraft and the frozen body of the deceased pet dog. The biggest challenge was rendering safe a nine-kilogram gas cylinder that had been rigged as an IED and installed under the caravan. With no other option available because of the lack of space between the caravan and ground, Smith crawled under the caravan carrying a few hand tools and wearing little more than his standard issue overalls and boots. After a tense hour of work, Smith detached the cylinder from the caravan and then moved it to a designated area on the property. There it was skilfully cut open and

the explosives element detonated, leaving the casing to be used as evidence.

The caravan and gas cylinder IED, prior to it being rendered safe.

On Monday 24 June 2002 the man pleaded guilty to 24 charges relating to his actions, the sentencing judge stated that 'it may be a victimless crime, but it is a serious breach of the law.' The judge decided to issue a suspended gaol term, and released the offender from custody, arguing 'the better answer for society is to have him

rehabilitated away from the obsessive ways.'[399]

On Friday 26 October 2001 Bathurst police officers Dennis Martin and Scott Anderson were called to the suicide of a man who lived in the south of the city. For the two police the case was largely a routine matter, and involved dealing with deceased's relatives to help prepare a report for the coroner. Some days later Martin was provided startling information by the family, one of whom had just remembered seeing their deceased relative place a sizeable amount of gelignite into a small safe in a back-yard shed, about a decade prior. The family believed the explosives were still in the locked safe, and they couldn't find a key. To Martin, a rescue operator and bomb appraisal technician, this was alarming news. After such a period of time it was almost inevitable that the gelignite was rotting – its chemicals crystallising – and as a consequence, the explosives would be more volatile and dangerous to handle.

Martin drove to the deceased's house in Howick Street to inspect the safe. The man had been a hoarder and the entire premises was cluttered with junk. Amidst the mess inside the metal shed, the policeman located the locked safe and could see small amounts white powdery residue emanating from inside, resting on the edge of the rusting safe door. Martin made an urgent inquiry with a nationally recognised explosives expert who believed the powder to be crystallised gelignite. The expert also expressed tremendous concern about the stability of the explosives and the high risk that any friction against the powder, even just opening the door, could cause an ignition.

The gravity of the situation was amplified by the location of the shed and property itself. Only metres away was the neighbour's house, across the road was one of the city's main fuel depots, and nearby was the railway station and major power lines. On top of this, on the other side of the railway line was the city's gasworks and another fuel depot. All these facilities were within a potential blast radius of detonating gelignite, there was also a risk that any leaking fuel from the depots would run into the stormwater system that passed underneath the street and headed to the city's central business district. Despite being a worst-case scenario, it was not fanciful to think that if the gelignite exploded it could cause tremendous damage to the city's infrastructure.[400]

Martin reported the developments to his supervisors and sought advice from RBDU. Unfortunately scans of the safe using the

Bathurst's handheld X-ray device proved inconclusive; it was not powerful enough to penetrate the thick metal skin. Meanwhile senior Bathurst police held a series of meetings with the local council and emergency agencies. Agreement was reached that the explosives would be removed from the safe and then detonated at the city's rifle range on the side of the nearby Mount Panorama. Provided the safe was not touched, authorities knew they had plenty of time to comprehensively plan for what was now called *Operation Howick*.

For almost two weeks a series of meeting and planning measures were implemented to prepare for the event. Five days out from the planned removal, RBDU's Terry Shepherd travelled to Bathurst to work with Martin and other rescue operators to create a bunker over the safe. First the yard of the house was cleared of junk and debris, before council workers delivered around 80 tonnes of sand. SES and police then shovelled the sand into thousands of sandbags. After the shed was cleared of every item except the safe, it was carefully disassembled. Surrounding the now-exposed safe on a concrete slab, a large sandbag bunker was constructed over the course of several days. This process included erecting timber frames so as they could support planks of wood that had more sandbags placed on top – a ceiling for the bunker. The idea was that should the safe explode as it was being opened, the sandbags would dampen the shockwave and lessen the chance of catastrophic damage to surrounding areas, although the bomb technicians in the bunker would almost certainly die.

As the day of the render safe operation approached, the party were joined by RBDU's Mick Smith. Last minute preparations included constructing a plastic cofferdam around the safe and placing plasticine putty around the safe's door. The safe was flooded with soapy water from a tube inserted through the keyhole; it was hoped the liquid would desensitise the gelignite crystals and reduce the chance of them rubbing and breaking against each other. Meanwhile, the fuel depot across the street from the house drained all their stocks – 100,000 litres was removed to reduce the chance of explosion should a detonation occur.

The render safe phase of *Operation Howick* occurred on Friday 16 November 2001. A 350-metre exclusion zone was established and authorities evacuated residents of the southern part of Bathurst. A series of last minute minor delays meant that bomb technicians Shepherd and Smith, bomb appraisal officers Dennis Martin and

Darryl Goodwin, and a locksmith who specialised in that brand of safe, did not enter the bunker until 11am. Almost immediately the team struck trouble, for the locksmith was unable to open the safe. For several hours inside what became a hot and claustrophobic bunker, the locksmith tried every trick he knew – all to no avail. In mounting frustration as twilight approached, Terry Shepherd idly looked at the safe's rear. From a certain angle he glimpsed a slight anomaly with one corner – scratching off some paint revealed lead swaging covering a screw. Checks of the three other corners found more screws. The safe had been designed to be stored in a larger safe, so its back was not welded shut. With the locksmith no longer required, the police took turns to remove the swaging and slowly unscrew the safe's back wall, before taking the metal plate outside of the bunker.

The safe did indeed contain rotting gelignite and detonators. In fact, one of the sticks had been connected to a detonator and safety fuse – for all intents and purposes it was ready to be detonated. When Shepherd pulled out this so-called 'tailed' stick,[401] Martin instantly recalled earlier expert advice that, in a worst-case situation, the explosives could go off with no warning. The experienced rescue operator instantly felt a sick feeling spreading over him:

> 'I say to people if I have ever felt fear in my life it was at that moment – the look on his [Shepherd's] face and knowing what we'd been told, I just expected it was just going to go off in his hand and we were all going to be killed.'[402]

The second phase of the day's operation was then put into effect. A council truck carrying a large load of sand had been parked in the yard near the bunker. Slowly, in the darkness of night, the explosives were delicately placed into the sand. Shepherd then took off the bottom half of his bomb suit and gloves before hopping into the driver's seat. This was done so he could operate the vehicle but still have some protection for his torso and head in case of a blast. The policeman began the slow drive to Mount Panorama, driving along deserted streets swept clear by all available Highway Patrol vehicles. Following the truck at a distance was a procession of RBDU and other police vehicles, a fire engine and ambulance.

Eventually, around 11pm, the truck arrived at the rifle range. After a short period of time, and in the still windless night, the explosives were detonated:

> ‘I could hear the echo of this explosion running away from the rifle range towards Bathurst, and I remember hearing everyone in Bathurst cheering, [their cheers] coming back up the hill!’[403]

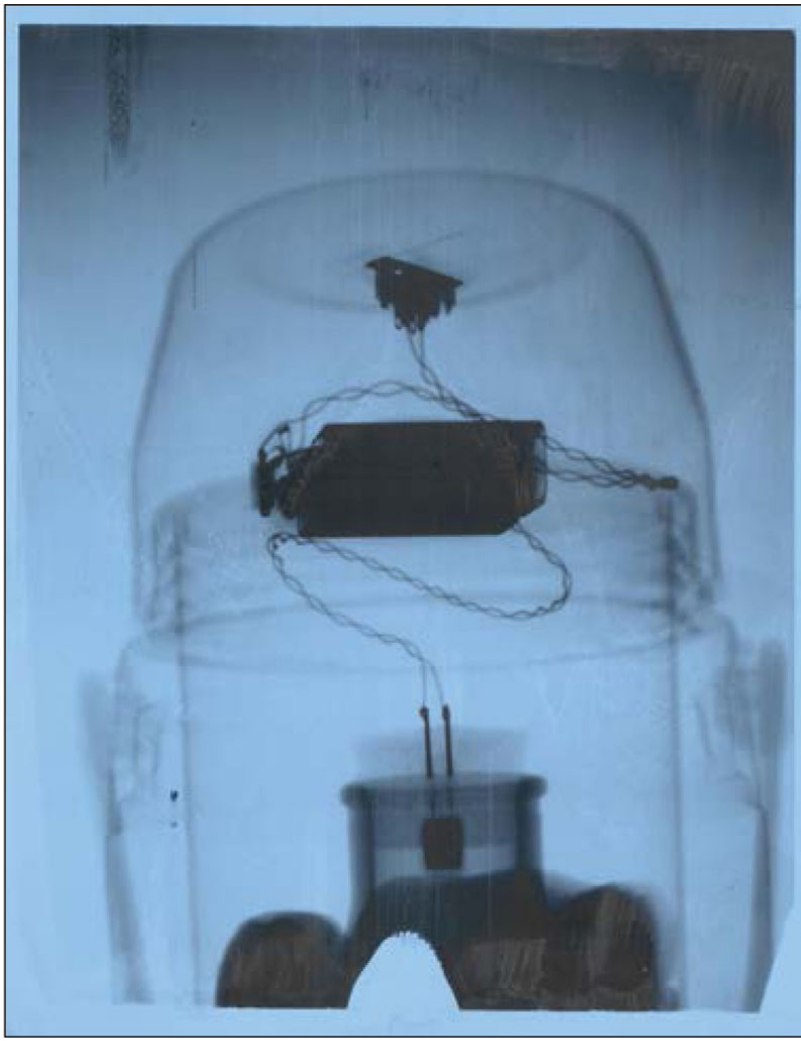
Operation Howick was not the only occasion that Dennis Martin worked closely with RBDU members in unusual circumstances. In December 2003 they responded to a suspicious device that proved to be an IED containing a highly explosive and volatile substance commonly used by terrorists throughout the world – triacetate triperoxide or TATP.

By late 2003 a middle-aged Sydney man with a history of violence reached a point where he wanted to die and hopefully kill others, probably police. The man had been sacked from his job in the demolition industry and was separated from his wife. He manufactured TATP in his unit and placed the volatile explosive into a jar, before carefully packing that into a hand-held cylindrical liquid cooler bottle of a type commonly used by families at picnics. The cooler’s screw top lid was modified to conceal a power source wired to the TATP jar, and a switch was drilled into the lid so the device could be detonated with the press of a button. After making his final preparations, on Wednesday 3 December 2003 the man drove through the Blue Mountains with no licence plates attached to his car, in what was later believed by police to be in hope of attracting their attention. Eventually the man parked his car in the middle of a dirt track in semi-secluded bushland near the Zig Zag Railway, to the east of Lithgow. He started a small fire in the car that produced sufficient carbon dioxide to asphyxiate him.

The following day, campers walking through the area discovered the vehicle containing the man’s body so they called police. Initially treated as a routine suicide, police photographed the interior of the vehicle, obtained formal certification of the man’s death, removed the body and sorted through the vehicle’s contents. Along with other property, the cooler bottle was initially placed at the rear of the vehicle. Afterwards, police had a closer look and saw the unusual switch in the lid that was attached to some electrical wiring. There were also some cylindrical cardboard postal containers, otherwise empty except for wiring and circuitry attached to a hole cut in the cardboard. Sensing danger, a request was immediately made through VKG for a bomb appraisal technician. Dennis Martin was the only qualified member available in the district, and responded to the

callout even though he was on long service leave.

About 90 minutes later Martin arrived in Bathurst's rescue truck. By this time the cooler had been moved well clear of the vehicle. An X-ray scan revealed an almost textbook looking IED so RBDU was immediately called and a 300-metre exclusion zone was placed around both the device and the vehicle. Arriving some time later, and in now drizzling rain, RBDU Sergeant Paul Smith and Senior Constable Steve Adams worked with Martin to re-examine the container, then develop and prepare render safe options. Meanwhile, counter-terrorism detectives (with RBDU support) executed a search warrant on the man's home. There they found evidence of TATP manufacture, terrorist literature including materials on making bombs and rockets. Hours were then spent analysing the premises and car to establish any links with terrorist organisations, and conducting searches at the local mail exchange to see if the dead man had posted IEDs to people he disliked.



The X-ray image of the cooler bottle with the wiring and TATP explosives visible in a jar.

In the late afternoon the bomb robot tEODor slowly approached the cooler and came to a halt just a few feet away. At the flick of a switch on the robot's remote control panel, it shot the device with its shotgun. The explosion was considerable – the tops of scores of surrounding trees lost their canopies and nearby boulders were blown out of their resting places. What instantly became obvious to stunned police was that had the man detonated his device in a crowded place, it would have caused considerable destruction, death and injury. Rather than a terrorist act though, it was deemed to be an extreme

case of attempted murder-suicide (fortunately foiled by luck).

About 3pm on mild and sunny winter's afternoon on Wednesday 3 August 2011 RBDU base received a seemingly incredulous dispatch from VKG – the father of a teenage girl in the leafy northern Sydney suburb of Mosman reported a hooded man had broken into their family home and tied a bomb around his daughter's neck. Local police were racing to the call and VKG requested the attendance of bomb technicians. Somewhat mystified by the scant details, and with the day's duty crew intrastate disposing an amount of commercial explosives, Ray Constable and Constable Julian Hicks responded first, followed 30 minutes later by Paul Smith with Constables Luke Buxton and Luke Bakey (the latter two having been urgently recalled to duty from their homes). This group of bomb technicians, joined later in the day by Constables Mark Reynolds and Brett Ferrari, represented the full spectrum of experience – from the veterans Constable and Smith, to the recently qualified technician Bakey. Inspector Ian Rotsey, RBDU's commander, also attended.

A substantial contingent of emergency personnel gathered in the street of well-to-do luxury homes by the time of RBDU's arrival. In fact the numbers of people kept on increasing with the arrival of media crews and other onlookers. The RBDU set up their vehicles and equipment in the street (which had been closed off) as neighbours were evacuated. The teenage girl had been home studying for an upcoming high school exam and was still inside the building. A police officer was positioned nearby providing verbal encouragement and comfort to her.[404]

Any disbelief RBDU members had about the call were instantly dispelled when Smith and Buxton entered the house wearing their bomb suits, and spoke to the distraught teenager. Sitting awkwardly on the floor in fear yet trying to retain her composure, the young woman held onto a black coloured handgun case that was tied to her neck by a black coloured wire. Hanging off the wire was a zip-lock plastic bag containing an extortion note and a thumb drive. The note and drive were delicately removed and taken to the bomb truck's command room to be analysed by RBDU members and detectives. The note in particular made a series of brief statements indicating the case contained a new type of fantastic explosive that could be detonated if there was sudden movement, if police were called to the house, if any attempt was made to cut the wire or open the case, or if the case was either refrigerated or X-rayed. The note ordered the

girl's parents to prepare a large payment to a nominated email address, and to emphasise the gravity to the situation the note cited a 2003 incident in America where a pizza delivery driver was killed by an exploding collar bomb after he had robbed a bank.[405]

Methodically setting about their analysis and research, the bomb technicians soon formed doubts about the device being a real explosive. The teenager was clearly in fear, her account of being forced to wear the device by a hooded man who had broken into her house, was sincere and credible. This notwithstanding, the note's 'red line' warnings such as not calling police and not moving the case, had been breached without the device detonating. Further tests were conducted; an explosive detector canine brought to the scene sniffed the device and gave no indications that it smelled explosives. This gave the RBDU operators the confidence to X-ray the device. Three X-rays from different angles failed to show the circuitry and power sources required to initiate an explosion. They also failed to show any item inside the case that suggested a wireless or remotely controlled detonator. In all, through using their longstanding processes and procedures, the RBDU technicians methodically came to a view the device was likely to be inert.

Throughout the operation RBDU were hampered by a range of factors including the steep incline of the land that prevented easy access for the men who had to wear the heavy bomb suits. The gradient of the incline also meant the robots used to monitor the teenager's welfare had to be carried to the house, again a difficult task in a bomb suit. The decision-making process to X-ray the device was also protracted as RBDU had to carefully assess the radiation risks. Once approval to X-ray was given by senior police, a lead-lined apron had to be secured from a hospital so as it could be laid across the young woman.

During this time rampant media speculation about events intensified public interest. Salacious conjecture over Australia's first collar bomb crime touched on whether the offender had targeted the teenage girl by mistake given the number of high profile and wealthy residents living in neighbouring houses. As afternoon turned to night, media commentary began to criticise police delays. The length of time it was taking, combined with a refusal of police to provide detailed running commentary on their actions, was perceived as incompetence. In reality, police were focussed on looking after the welfare of the girl and her family who were wracked with fear. As the

senior bomb technician for the incident, Smith also had to ensure the welfare of his men – extended periods wearing bomb suits test the stamina of even the fittest person. Time was further taken up through most actions being carefully rehearsed prior to being conducted in the house, so as to minimise the chance of mistake or mishap. Furthermore, police had to deal with a number of unsolicited contacts from the public and other agencies, providing advice on how to deal with the situation. Most calls were well intentioned but did not materially impact the decision-making processes of the bomb technicians.[406]

By mid-evening the RBDU operators present were unanimous that even though they didn't know exactly what was inside the case, it wasn't explosives. Grilled and challenged by senior police for some time about their views, just prior to midnight the bomb technicians were given approval to action their rescue plan.[407] Ferrari and Reynolds moved into the house wearing light armour suits, helmets with visors, and carrying bolt cutters and rescue cutting sheers. Attempts were made to cut the wire but frustratingly the cable kept slipping in the shears. Instead, a grinder unit with air cylinder and a plastic shield were obtained. After placing the shield over the girl to protect her from sparks, the men set about a delicate and time-consuming task of cutting through the high-tensile wire. Twenty-five minutes later, just after midnight, the wire was cut and the teenager spirited to her family. The black case was again X-rayed and later opened at a secure location. It was found to contain little more than a cable lock with some wires.

Luke Bakey (centre) and Luke Buxton (right) preparing to enter the girl's home. Mark Reynolds (left) is reviewing photographs of the device taken earlier.

The offender, an Australian accountant, was arrested in the USA less than a week after the incident. Later extradited to Australia, the man pleaded guilty to charges of aggravated break and enter, and detaining for advantage. He had been aware of the finances of the teenager's father and was motivated by a desire to extort money. The punishment was imprisonment for 13 years and six months, with a non-parole period of 10 years. An appeal against the sentence by the offender was unanimously dismissed by the courts. Outside of court on the day of the sentencing the teenager thanked police and indicated she was looking forward to a future in which her name would no longer be linked to that of the offender.

The 'Mosman collar-bomb job' was a career highlight to each of the bomb technicians there, it was challenging and not without its frustrations. While the device was ultimately discovered to be a hoax, the pressures of the case were at levels not previously encountered by any of the technicians – experienced or otherwise. The location of the incident brought logistics and physical delays; the circumstances surrounding the crime were bizarre and at times illogical. Senior police and officials took an extremely keen interest in developments, as did the media. Foremost in the mind of all police was the plight of the young woman and her family, who were traumatised by the

actions of a hooded criminal. Through all of this the technicians were confident in their decisions and actions but had to deal with intense real-time scrutiny. Afterwards, and despite the criticism they received by some media about the length of the operation, each RBDU member drew satisfaction from ensuring that the young woman was safely reunited with her family.

TOWARDS THE NEW MILLENNIUM

In spite of all the dramatic organisational developments during the 1990s, Rescue Squad/RBDU members and de-cent rescue operators throughout the state continued to respond to a full range of rescues, police support calls and bizarre situations. Many of these required innovative solutions to puzzling situations.

A man walking his dog along a narrow beach at Botany Bay during the early morning of Sunday 26 March 1995 discovered a human skull, laying face upwards and protruding from a weather beaten and grass covered sand dune. Police were promptly called. Suggestions that the body may have been that of an ancient aboriginal (due to the proximity of the location to a known sacred burial area) were ruled out upon close inspection of the skull – it was attached to a skeleton that had a cardigan on it. Using a mechanical digger to remove the top layer of sand, police discovered the skeleton was mostly intact – a very rare occurrence for what was now suspected as being an impromptu gravesite of a murder victim.[408] The immediate conundrum for crime scene officers was finding a way to keep the skeleton as intact as possible for its removal to the forensic medical centre.

Senior Constables Bill Davis and Alan Wade from the Rescue Squad were the first from the team to arrive at the beach. Faced with an unprecedented challenge of keeping the skeleton in-situ and in orientation, Davis suggested using a wire to cut the sand underneath the body – like a cheese cutter. The body could then be moved in-situ to the mortuary. With the assistance of additional operators from Zetland and forensic police, the men spent several hours stabilising the ground around the skull by building a cofferdam with sandbags and then filling the gaps with sand from elsewhere on the beach. This kept the skull in position and (loosely) tethered to the rest of the skeleton, and it protected it and police from the incoming tide. Well into the evening, using a mix of small shovels, garden trowels, spoons and paint brushes, rescue and crime scene police carefully cleared the sand on the sides of the skeleton. Evidence found included rotting shoes, jeans, a belt and other loose threads of clothing. The team dug further into the ground, deeper than the skeleton, to the point it was in effect resting on a pedestal of sand. Davis and Wade then used a

wire to cut the pedestal, about half a metre beneath the skeleton. A spinal board was pushed into the gap created by the wire, rescue operators lifted the mostly intact skeleton and board, placed them into a body bag, and then onto a litter. During the subsequent weeks, as the skeleton was extensively examined by a number of experts, rescue operators meticulously hand-sifted the tonnes of sand collected from the beach, and which had been trucked to the base at Zetland.

The body was quickly confirmed as a brothel keeper Harvey Jones who had disappeared in 1983. Detectives used the evidence gleaned from the body, clothes and the sand, to build a brief against one of Sydney's most notorious criminals, Arthur 'Neddy' Smith. Jones and Smith had been associates and a lengthy trial in 1998 saw Smith convicted of murdering Jones over an outstanding debt. Pleasingly for the Rescue Squad, the innovative idea to cut the ground under the body was favourably commented upon by the Force's forensic anthropologist. The method has since become a standard technique by forensic investigators and archaeologists to recover decomposed bodies or skeletons, in-situ and orientation.

In the morning of Thursday 20 April 1995 a commercial diver commenced a routine inspection of an inlet-cooling pipe at a factory pump house at Port Waratah, Newcastle. To get to the pipe the diver entered a large water storage area and in near black water, felt his way towards the pipe's entrance. Contrary to standard procedure, the suction pump at the other end of the pipe was not turned off and the diver was soon sucked in, five metres under the waterline. Sensing something was wrong, the diver's colleagues called for help and unsuccessfully searched the water, after turning the pump off. Within minutes Senior Constable Ian Boughton from Newcastle Police Rescue arrived. The policeman instantly volunteered to enter the pipe to locate the missing diver despite never having dived before, and actually had a phobia about water stemming from his childhood when he found the drowned body of his brother. Boughton felt the slim chance of finding the victim alive outweighed the risk to his own safety.

Stripping down to his shorts and singlet, the policeman placed on scuba equipment and received a 30-second briefing on how to use it before entering the water. Unable to see more than a few centimetres in front of him, Boughton felt his way to the pipe's entrance and entered it. The pipe was less than a metre wide yet became much

narrower due to a build up of crustacean growth and algae. It descended vertically for three metres and then turned 90 degrees. The policeman fought off a sense of panic as he forced himself further along the pipe in what was now pitch black water, eventually touching what he soon realised was the missing diver's outstretched but lifeless hands. After three hard pulls from Boughton, the diver was dislodged from his position but had to be dragged back through the pipe – an extremely awkward task for the policeman who was still learning the basics of underwater movement.

Gary Storey from Wollongong rescuing a young teenage girl during flash flooding in suburban Towradgi on Monday 17 August 1998. Devastating rains on the day caused widespread flooding throughout the Wollongong region. Photo: Fairfax.

The two men returned to the surface as those above were beginning to seriously wonder if Boughton had also become trapped. The victim was hauled from the water, missing a foot that had been chopped off by the pump's blade. By now paramedics and Boughton's teammates were present, emergency workers then spent almost 30 minutes resuscitating the victim. Eventually a faint heartbeat was restored and the man was whisked to hospital. Tragically, doctors diagnosed that he would never regain consciousness so the following day life-support was turned off, and the man died. For his actions

Boughton received a number of awards, the most senior of which was the Star of Courage.

Zetland operators Tony Geddes and Rob Golding stand inside a grave during their exhumation of a murder victim. The exhumation was to enable forensic specialists to re-examine the victim to gather evidence for detectives.

In the morning of Thursday 27 February 1997 a Frenchman Alain Robert walked through the Sydney's central business district. Slim of build but sinewy and fit, the male walked with a sense of purpose and equipped with climbing shoes, some chalk powder, three small pieces of rope, a karabiner and some masking tape. Otherwise known as the 'French Spiderman', the urban climber had free climbed

numerous skyscrapers and towers throughout the world, and later told reporters he visited Sydney with a view to climbing 'something high and difficult' but felt the Sydney Opera House was 'too easy'.[409] He instead set his sights on Sydney Tower, the second tallest structure in the Southern Hemisphere. Soon after commencing his ascent on the outside of the 309-metre tall building, Robert was seen by passers-by and the police were called. Zetland's duty crew on that day was Shannon Smith and Bill Davies; they arrived when the Frenchman was just under half way up the tower's central mast. The two operators rapidly made their way above the climber using an elevator and stairs to a viewing deck. After assessing the best place to intercept the climber (a service gantry underneath the tower's viewing decks), and seeing that the climber was steadily but not rapidly ascending the tower, they returned to the rescue truck to obtain roping and associated equipment.

The two operators became separated in the labyrinth of stairwells in the building and Smith returned to the service gantry first. Hovering nearby was a media helicopter filming events, with Robert now just a few metres below. Equipped with just a harness and some tape (Davies had the ropes), Smith maneuvered over the safety fence and then shackled herself in an improvised fashion to the railing, with sufficient slack to enable her to reach down underneath the gantry. In a very polite fashion Smith introduced herself to the Frenchman and then in one motion, grabbed hold of him, pulled him up and hoisted him onto the gantry (with a security guard helping to pull the man over the fence's railing). By this time the Spiderman was exhausted and thanked the policewoman for her help, but he was less than complementary towards authorities later when he was charged with risking the safety of another person (Smith). The following day he pleaded guilty to the charge, was fined $1000, and subsequently went on to climb many more buildings both in Australia and throughout the world.[410]

On Wednesday 7 May 1997 a Sydney businessman Bernie Whelan received a ransom note in his mailbox from the person responsible for the previous day's abduction of Whelan's wife, Kerry. One million dollars in cash was demanded, an amount that the worried husband quickly assembled. The note also instructed the businessman to not tell police, an instruction he ignored. A major police investigation codenamed *Operation Bellaire* was commenced however in the following weeks no further contact was made by the abductor(s).

Police soon identified a former employee of Whelan's company as the prime suspect, and search warrants were executed at that man's rural property at Bungonia, to the south-east of Goulburn, on Wednesday 21 May 1997. Some weeks later, police also conducted an extensive search of the rugged and treacherous part of the Bungonia National Park that adjoined the man's property.

Rescue operators from Goulburn were heavily involved in the three-week search of the national parkland. The operation was particularly complex and risky as it was dense, steep bush littered with disused gold mine shafts, caves and crevasses. The search's main focus was on over 60 mineshafts, each more than a century old. While some were little more than large holes in the ground, others were up to 80 metres deep with horizontal connecting tunnels. For the deeper shafts rescue operators wore breathing apparatus and carried gas detectors, they abseiled down and prussiked their way out. In addition to the threat of gas, there was a real risk of shaft collapses and more than once operators were hit by small rock falls when they were in the shafts. Some of the shafts were too dangerous to enter and police improvised using the assistance of a local plumber. The police affixed a torch to the end of the plumber's 'electric eel' extendable camera, and it was lowered into the most dangerous shafts.[411] The police also used the services of an experienced bush tracker equipped with a diviner machine to triangulate areas of interest. The thorough search unfortunately failed to locate evidence of significance or the victim's body. Nonetheless, the records from the search formed part of the brief of evidence that obtained a conviction for murder in 2006. In 2007 the offender was also convicted of the 1995 murder of a 74-year-old woman. He died in 2016, refusing to the end to reveal the location of Kerry Whelan's body.

Not every rescue operation goes according to plan. Wollongong OIC Manii Verzosa accidently caught his thumb in hydraulic equipment while rescuing a truck driver from his crashed vehicle at Stanwell Tops on Tuesday 25 August 1998. The pain was palpable but luckily did not result in permanent injury. Photo: Fairfax.

About noon on Sunday 26 April 1998 a light plane containing three holidaying couples (including four physicians) took off from the coastal town of Merimbula and headed back to their home city of Albury, on the state's southern border. Less than an hour into the flight the plane encountered turbulent conditions as it flew over the Snowy Mountains. Within a few minutes the plane's wings iced up and the pilot struggled to maintain height and direction. Soon the plane disappeared from flight control radars. Authorities were notified and aerial searches were commenced. Around 9am the following day a Royal Australian Navy helicopter found wreckage on the side of Mount Jagungai, in remote alpine bush inside the Kosciuszko National Park.

Police rescue operators from Cooma made their way by four-wheel drive to the scene, a difficult drive along dirt roads in steep terrain. At the location they found mangled wreckage and were shocked by the inability to visually establish the identity of any of the victims. Joined by forensic police, rescue operators embarked on the DVI process whereby the area was thoroughly searched, remains located, mapped and then collected. Meanwhile investigators from

the Bureau of Air Safety Investigation inspected the wreckage as part of their inquiries. The two groups worked together and planned how to remove the victims and debris. Helicopters were called upon to fly the remains of the victims from the site, and to carry parts of the plane that could be cut up and placed in cargo nets attached to the undersides of the aircraft. It took almost a week for this process to be completed, during which the frigid weather made conditions extremely unpleasant for all concerned.

For rescue operator Stewart Woodward, this was the most confronting job he attended during his posting to Cooma. The terrible damage caused to the victims, the harsh weather and the technical challenges associated with the operation, in many respects exceeded those he encountered at Thredbo's landslide the previous winter. It was certainly a job he was happy to complete, and one of his last callouts before he transferred to RBDU. Only a few weeks later though, he was called to another fatal plane crash, this time in bushland next to the Hawkesbury River, to Sydney's north.

A short time after 1pm on Sunday 26 July 1998 a small commercial floatplane carrying a pilot and four passengers took off from Sydney Harbour en-route to the Hawkesbury. Around 1:24pm, in foggy weather, the plane crashed into a heavily timbered and sandstone ridgeline immediately above the water's edge. The plane had been circling in a second attempt to land on the river, the first being aborted because of poor visibility.

Performing a shift supervisory role at Zetland, Woodward attended the scene at the request of local police coronial staff. The Hawkesbury was well outside of RBDU's rescue area however coronial staff wanted to consult an experienced police rescue operator. The forward command post was a room at a waterside restaurant about 500 metres in a direct line from the crash site, but on the other side of the river. There, Woodward learned that a party of emergency personnel had found the plane and confirmed all on board were dead. The policeman was then ferried on a small launch across the river and walked the steep climb to the scene, all in dense fog. Largely in one piece, the plane was badly crumpled but had not caught fire. Four of the five deceased were in the plane's fuselage; one body had been thrown clear.

In the lead up to the 2000 Paralympics, police rescue operators assisted in this publicity event. Garry Webster and Mick Smith are pictured with two paralympians rappelling underneath the Sydney Harbour Bridge.

Returning to the restaurant at dusk, Woodward participated in a lively interagency meeting and convinced those present that given the difficult terrain, the deteriorating weather and the poor light, it was too dangerous to immediately commence a body recovery operation. The scene was sufficiently isolated that it could be guarded with a minimal contingent of police until the next day when the weather would be better and more conducive to a recovery operation. At the request of the coroner's officer, Woodward briefly returned to the site to place the body of the victim that had been

thrown from the plane, into a body bag, to protect it from any animal that may take an interest during the evening. He then returned to Zetland and organised for a team to be at the forward command post before first-light the following day. Fully briefed about the task to be done, Alan Wade, Garry Webster and John Williams led a small group of local emergency personnel in recovering the victims.

OFF THE RAILS FROM GLENBROOK TO WATERFALL

Around 8am on Thursday 2 December 1999 Senior Constable Simon Robinson arrived home after a busy nightshift at Springwood Police Station in the Blue Mountains. Not long after entering the house he went to bed hoping for a good sleep on what was predicted to be a very hot Summer's day. Within minutes of falling asleep though, his mobile phone rang. It was a call from the station reporting a train crash in the nearby Lower Mountains' township of Glenbrook. Still groggy from just minutes of sleep, it took a few seconds for the information to sink in: he was the on-call member for the Blue Mountains Police Rescue Unit and had one of the team's Holden Rodeo utilities parked in his driveway. Robinson immediately put on his white overalls, jumped into the Rodeo and raced to the scene with the vehicle's emergency lights and sirens activated.

In the few minutes it took to get to the scene there was minimal police radio traffic about the incident so Robinson was not overly concerned or apprehensive. He had attended several derailments previously but none had been particularly complex. The policeman's curiosity was raised however when, a few minutes from the scene, he noticed a light plane circling at low level over bushland where he knew the railway line to be:

> 'I thought "that's a bit odd and if that's the attention it's got already, this could be interesting."'[412]

The crash site was at the base of a narrow cutting, 15-metres deep, in bushland well away from the mountains' main highway. Robinson drove through Glenbrook's leafy streets to a dirt access road that he hoped would place him at the train. He knew that the access gate was normally locked but figured that as it was close to Glenbrook's train station, it wouldn't be too difficult to locate someone with a key. As the policeman approached the gate though, what he saw amazed him. Walking out of the railway siding were scores of train passengers in various states of dress (from business attire to informal and extremely casual outfits). Several appeared to be injured or in distress, others were dazed or bewildered, some (especially railway staff) were taking more active roles in leading people to the roads,

nearby buildings and safety.

A railway employee had unlocked the access gate prior to Robinson's arrival so the policeman drove slowly along the dirt road, through the moving crowd, and soon parked alongside a four-carriage double-deck commuter train that had stopped on a piece of gently curving track. In the distance Robinson could see another stationary train, whose last carriage was a loaded double decker car carrier. Already present at the site were a small number of police, ambulance officers and firefighters, working to evacuate the carriages and attending to the injured in an impromptu triage area at the side of the cutting. Some victims were laying down, others sitting against the rock wall.

The inter-city commuter train had driven at speed into the rear of the Indian-Pacific trans-continental tourist train, which had been stationary at the time of the collision. The effect of the crash was a horrific entanglement of stainless steel and other metals, shattered glass and damaged wooden interiors from the commuter train. The front third of the commuter train's first carriage was shredded, the force of the collision had also violently shunted it to an angle of almost 50 degrees on its right side. Indeed the only thing preventing the first carriage from tipping over was that it was jammed into its precarious position by the four large horizontal metal beams of the Indian-Pacific's car carrier.

It was clear that people had died; their torsos or limbs were protruding from the lower side of the commuter train's tilting carriage. Two bodies (that of a mother and her five-year-old son) could also be seen laying in the tangled mess of metal, wood and seating inside the front carriage. Amidst the general commotion of the scene, the sounds of aircraft (including media helicopters) loitering overhead, and of an increasing number of approaching sirens, Robinson was joined by more of his teammates from Springwood. The most senior was Sergeant Tony Malone who became the Rescue Coordinator.

Tony Malone (white overalls) in conference with a senior police officer and Justice Peter McInerney, who had just been appointed to investigate the causes of the crash.

The gap between the commuter train's first carriage and the cutting wall. Police rescue operators visible are Ian Colless (left), Paul Kelly and Tony Malone (right, in middle of group of firefighters).

Simon Robinson (left) and Ian Colless pass an injured patient from the commuter train to waiting firefighters.

Within an hour of the crash the rescue phase of the operation was completed. Most of the injured from both trains had either been able to walk away or were treated at the impromptu triage area, with 51 people subsequently taken by ambulance to hospital. Scores more received treatment for minor injuries but were not hospitalised.[413] When the last of the injured were driven from the scene in an

ambulance, Malone ordered a temporary evacuation of the site. This was partly to await the arrival of the coroner, forensic and DVI police, but also to give the sergeant time to develop a concept of how the badly trapped bodies would be recovered without subjecting them to brutal force from options such as pulling the carriages apart.

Malone, a veteran of almost 20 years of rescue duties at Marrickville, Zetland and more recently Springwood, had attended numerous complex multi-agency recovery operations including Newcastle's earthquake, and instinctively knew that this body recovery operation would be a serious challenge. As he formulated his thoughts the sergeant entered the first carriage alone so as he could examine the scene close-up. This almost ended in serious injury though as a door that had earlier been jammed open in the crash, suddenly fell down onto the policeman as he was making his way out. Fortunately Malone reacted quickly and the door struck only a glancing blow. The incident heightened his attention to the need for safety and the dangers posed by the conditions inside the carriage.

Once outside, Malone called for a series of interagency meetings to develop plans and contingency options. Keen to avoid a situation where the carriage could collapse or topple over with rescue operators inside it, the sergeant explored options to stabilise the train. Aware that the Fire Brigades' USAR unit in Sydney had a large number of metal rigging props that could be used to help temporarily stabilise the carriage, Malone asked firefighters to dispatch the equipment. He also authorised a plan in which four pairs of rescue operators (each pair being a police rescue operator and a firefighter) would work simultaneously at the train, with paramedics in close support. Two pairs of rescue operators would be inside the badly damaged first carriage (one on the lower floor and one on the upper floor), while the other two pairs would work from the car carrier. Malone was keenly aware of the ongoing tensions between rescue services in the Sydney Metropolitan Area and wanted to have members of each agency work closely together. Because of the soaring temperatures on the day, the teams would be rotated on an hourly basis with other police and firefighters who were waiting nearby.

As these discussions took place the State Rail Authority's Emergency Unit based in Sydney arrived at the site and set about stabilising the commuter train's tilting first carriage. On the side of the carriage that had been lifted from the track, heavy-duty chains

were tied between the carriage's bogey set and the rails below. On the other side the railwaymen set up their own sets of rigging props. Malone was assured by the railwaymen that the carriage would not topple.

Prior to the recovery operation commencing the teams were brought together trackside, next to the carriage. There they met with Malone and Police Commissioner Peter Ryan, who had just arrived to inspect the scene. The state's most senior policeman thanked the group for their dedication and highlighted the importance of their task, reminding them that the eyes of the world would be watching their efforts.[414] Just before midday the first four teams set to work but were immediately beset by technical troubles. Entry into the entangled carriage could not be forced from the car carrier side, no matter what handheld piece of equipment or technique was used. As a consequence, those two teams were redeployed by Malone into the tilting carriage. Now with four rescue operators on the top floor of the commuter carriage, and four on the lower floor, it was hoped rapid progress could be made. These hopes were forlorn.

Paul Kelly, Steve Day and firefighters inside the carriage, in stifling temperatures.

Police accessing the commuter carriage through a removed window. Left to right: Tony Malone, Ian Colless (moving out), Ben Macfarlane, Simon Robinson and Paul Bousfield.

Conditions were oppressive for the operators. The removal of several of the carriage's windows didn't prevent the inside temperature racing past 40 degrees Celsius. The location of the railway cutting trapped the heat of the sun and a lack of a breeze turned the confined space into a pseudo-sauna with increasingly foul smells. The severe tilt of the carriage made it difficult to obtain a firm footing and caused many rescuers to suffer disorientation and nausea. They were also hindered by restrictions on the tools they could use.

Abrasive cutting equipment was ruled out due to the risk of sparks setting fire to the insulation within the carriage walls, so the men had to instead rely almost solely on hydraulic spreading and cutting equipment.

While the carriage's internal plywood walls and some fittings could be easily cut and removed, the stainless steel bulkheads and outer skin could not. The way in which the steel had been shaped meant it proved resilient to even the most advanced spreading and cutting rescue equipment available to both the police and firefighters. Hours were spent on trying to spread particular sections of framework, only for the framework to pop back into its preconfigured shape at the slightest nudge elsewhere. The extremely close proximity of the car carrier was a constant hindrance, preventing access from outside of the carriage and denying space into which parts of the debris could be pushed from the inside. In the forefront of rescue operator thinking throughout the process was safety and a desire to not further disfigure or damage the victims. It was a tough ask given that the amount of space surrounding the victims able to be manipulated by emergency personnel amounted to little more than that of a couple of telephone booths.

In their unrelenting efforts, the teams were fatigued yet supported by tremendous acts of generosity and support. Ambulance officers remained in close proximity to monitor rescue operator welfare and strictly enforce a rotation system. This ensured all operators were hydrated, fed and kept in good health. A RAAF detachment from a nearby base set up marquee tents to provide shade and shelter, and gave food to rescuers and passengers alike. These items were to have been used later in the day at a friendly social sporting event between the military and police, but were donated to the rescue and recovery operation instead.

Throughout the day, as a core group of around 25 rescue operators were rotated through the carriage, the commotion and activity surrounding the immediate site continued at a frantic pace. For Tony Malone in particular there was little time to be inside the carriage directly supervising police and firefighters. Instead he found himself constantly called upon to brief visiting dignitaries, senior police and other officials. This included Commissioner Ryan, Premier Bob Carr, the Minister for Roads and Transport Carl Scully and several other politicians. The presence of the politicians was not surprising. The NSW Government was at the time under considerable

pressure for the general state of the rail network, and this incident marked the sixth train collision or derailment in 1999 alone.[415] Malone also spent a good deal of time briefing the head of a commission of inquiry appointed by the government late morning to review the causes of the collision. Also at the site throughout the day were representatives of various companies involved in railway operations, each wanting hourly updates from Malone on progress and estimations of time until the site could be cleared. And naturally, scores of reporters required periodic briefings. Although Malone didn't speak to the media directly, he had to brief the senior police who did.

The other issue that posed serious challenges for police in general, and Malone in particular, was an over-response of emergency resources. When he requested the Fire Brigades' USAR equipment for local rescue operators to use, the sergeant did not realise that scores of additional firefighters would also be sent. In fact, the majority of Sydney's fire rescue capacity on that day was dispatched.[416] The remoteness of the crash site, the dense bushland and the narrow roads approaching the general location, meant that the majority of these firefighters had to be staged well away and ultimately most were not used. The two shipping containers containing USAR equipment were deposited as close to the scene as possible but their contents had to be manually carried well over 100 metres and lowered to the trains, using an improvised flying fox arrangement from the roadway above the cutting. The equipment was gratefully received by police but attempts by senior Sydney firefighters to assume control of the operation were robustly rejected by Malone who, with the support of his senior officers, reinforced that this was not a rescue operation but a police-lead body recovery mission and a potential crime scene. The role of firefighters was to assist police, not usurp them.

It was not until after 11pm that evening, around 14 hours after the crash, that the last of the seven bodies was recovered. As police rescue operators were stood down, forensics and DVI police worked further into the night at the site and from the Springwood Police Station, to establish and confirm victim identities. By dawn the carriages had been pulled apart and towed away, and the site cleared so commuter trains could run again.

Glenbrook was a very challenging yet troubling event for rescue operators. The effectiveness of their hydraulic rescue equipment was

shown to be limited in dealing with the stainless steel exteriors of trains. The dedication and perseverance of rescue operators had overcome this obstacle but the operation had taken a long time to complete. Had the victims been alive it was debateable if they would have been extricated before succumbing to their injuries. More positively, the operation had been successful and relied on minimal support from outside the local district. Certainly the USAR equipment and the support of the railway emergency unit from Sydney had been vital for success, however most personnel inside the carriage throughout the day were from the Blue Mountains area and Malone felt they worked brilliantly together. At no stage did he feel the need to call for extra police operators from Zetland or Bathurst, nor the rescue units from other services in neighbouring districts.[417]

Within weeks though, as a union representative, Malone found himself involved in the latest round of arguing over which service would be the primary road rescue unit in the Blue Mountains. The sergeant had experienced first-hand the worst of the tensions in Sydney between police, ambulance officers and firefighters during the 1980s and early 1990s, and had been pleasantly surprised on his transfer to Springwood in 1992 by the high degree of cooperation between the services in the Blue Mountains. This level of collegiality, reinforced through operations such as Glenbrook, made it more of a shock for police that firefighters would make another sudden attempt to usurp them, this time through a boardroom manoeuvre within the State Rescue Board in Sydney.

Malone attempted to seek the opportunities from the situation and propose a way forward for the unit. Analysis of data revealed the number of road rescues in the mountains had declined by around 70 per cent over the previous decade due to major improvements in the road network and better designed vehicles. By early 2000 road rescues amounted to less than 10 per cent of the unit's overall annual workload. Malone argued that sharing the road rescue role with firefighters would free-up time for the police to concentrate on increasing their proficiency in tasks such as swift water rescue, advanced roping and search and rescue coordination. His views were in the minority however; the unit was angry that their futures were being decided in Sydney without consultation from their senior management.

In Sydney too, some decisions were made by senior police that disappointed rescue operators. One was a decision for RBDU to

temporarily cease rescue operations for the month of the Olympic Games. This decision was made on the assumption that all RBDU personnel would be heavily involved in bomb response duties and that the Fire Brigades had the capacity to undertake rescue operations. This was not well received by all the operators but as events transpired it was a short-lived initiative. Within hours of taking on the role, inner- city firefighters struggled to promptly effect a rescue at a road crash. Later that day, urgent deliberations between the services resulted in RBDU resuming their lead rescue role.

Paul Smith (left), Ray Constable (rear) and Terry Hanson from RBDU prioritising work at a major road rescue. A large truck crushed several small cars into a stationary bus at a traffic intersection at Botany. Numerous people were badly injured and trapped.

The conclusion of a successful Olympics saw the end of the single largest peacetime security event in Australia's history. The planning and preparations for the Games had consumed a considerable portion of the Force's attention for eight years, it was now free to concentrate on both its day-to-day policing obligations, and furthering reforms implemented in the wake of corruption scandals and controversies in the mid-to-late 1990s. At the same time there was escalating political and media debates on the impact of crime in the state, and the community's fear of crime itself. For police command this meant a 'relentless focus on operational policing at the local level,'[418] ensuring

that as many police as possible were allocated to crime reduction duties.

Amidst a suite of strategic reviews to achieve this goal, in May 2001 Deputy Commissioner Ken Moroney initiated an internal review of police rescue services in NSW. The reviewer, a superintendent, was tasked to examine how it and the de-cents contributed to or complemented the organisation's mission of 'providing ethical cost effective crime reduction', and evaluate the viability of transferring responsibility for rescue operations to other organisations. Statistics included in the final report included police rescue owning over $5 million of specialist equipment and 32 dedicated vehicles, and cost approximately $3.5 million a year to operate. In Financial Year 2000/2001 the 100 police rescue operators then accredited with the State Rescue Board[419] had been called to 4847 incidents, and arrived at 3932 of those incidents (the rest were call-offs or incidents that were otherwise resolved prior to the arrival of rescue operators).[420]

The voluminous review recommended withdrawing police from general land based rescue operations and transferring those services to the Fire Brigades. The report noted the failure of the Force to embrace the Sydney-based Operational Support Units (OSUs) in the 1990s yet it nonetheless recommended that RBDU and most of the de-cents be converted into OSUs. The renamed units should focus on support work (including body recovery incidents, supporting police responses at demonstrations, building collapses and gaining entry to hardened premises), enhance land search coordination skills and continue to undertake bomb appraisal and disposal duties. Economic efficiencies would be gained from disposing rescue equipment not needed for OSU work, phasing out specialist vehicles and determining whether the de-cent OSUs actually needed to be retained at all. Indeed the report recommended the immediate disestablishment of the teams at Bathurst and Springwood. The benefits of the proposal, argued the review, was reduced expenditure, a lessening of the 'distraction' from core business policing priorities, improved responses for land searches and reduced conflicts between rescue services.[421]

The review was delivered in September 2001 and was accepted by the Force's senior executive. The proposal to transfer rescue responsibilities was openly discussed with the State Rescue Board and other agencies. Crews at the fire stations likely to take over rescue responsibilities began to ramp up their training while local media

outlets were briefed of a pending withdrawal or closure of the police teams. In May 2002 Ken Moroney, newly promoted to commissioner, formally briefed the plan to Minister for Police, Michael Costa. The Labor politician promptly quashed the proposal:

> 'In the wake of September 11 and the Christmas bushfires, I'm not prepared to scrap the rescue squad. Police rescue – which will celebrate its 60th anniversary in October – has always been there when the community need it and we must continue to support its brave and dedicated police.'[422]

In an event that became folklore within the police rescue fraternity, the Minister (a long standing union official) went to Zetland on Sunday 13 May 1992 to discuss his views on the report with RBDU members. Eschewing minders and senior police officers, Costa spoke to the group passionately about the squad, its role and future. He strongly encouraged the police to uphold the heritage of the unit, to believe in themselves and their place in supporting the community through times of trouble. The Minister argued it was important for units like rescue to be prominent and provide professional services to the public, particularly in an era of great uncertainty created by Islamic terrorism. Costa repeated the message in his subsequent travels in the state, whenever he came across police rescue operators.

Minister for Police Michael Costa at Zetland. In the photo are (left to right): Ray Constable, Paul Smith, John Williams, Michael Costa, Dave Guff, Garry Webster, Wayne Bolitho and Barry Thompson.

The review of 2001 canvassed the differences between rescue

operations and police support work. Like reports before it – with the notable exception of Major-General Grey – the 2001 review suggested that the differences could be neatly distinguished to the point that the tasks are mutually exclusive. This has invariably been used to justify arguments for withdrawing police from rescue work. The operational realities for a police rescue operator in NSW suggest that the demarcation is somewhat less definite. A rescue incident near Goulburn on Saturday 26 February 2000 typifies where the lines are often blurred.

In the early daylight hours an anonymous phone call to police reported a man being trapped on a narrow cliff ledge, 100 metres above the valley floor near Cooee Point at the Slot Canyon, inside Bungonia National Park. Among the responders were Goulburn rescue operators Phillip Downes, Peter Karooz and Robert Boeg. The location of the call instantly raised their suspicions of an unlawful Building, Antennae, Span and Earth (BASE) jump gone wrong. These thoughts were confirmed when upon arrival they were informed by another police officer at the bottom of the cliff that the trapped man was attached to a parachute (itself wrapped around a nearby tree and rock). During the man's jump, when the parachute deployed it clipped the cliff and then became caught. Almost miraculously, having skidded down part of the cliff, the man came to a thudding halt on a ledge little more than the size of a small table.

Guided by the directions of his colleague from the valley below, and with the assistance of other operators and experienced recreational abseilers, Downes gently approached the edge of the loose shale cliff top, and then belayed 200 metres to the trapped jumper. The man, a Danish rigger who lived in Australia, was quite sheepish towards the policeman but thankful for his help. Once the rigger was placed into a safety harness, and his equipment gathered from the ledge, the two belayed to the valley floor. After walking from the valley floor the BASE jumper received medical attention before being arrested by Downes for conducting a prohibited activity and risking the safety of another person. Property seized included the parachute and pack, helmet and a video camera that had been strapped to the helmet.

In court the following month the male pleaded guilty – his lawyer noted two previous BASE jump related fatalities in the Bungonia area but sought to downplay the risks, as his client was an experienced jumper and Vice President of the Australian BASE Jumpers'

Association. At the same time the Association's Secretary came forward to claim the seized property as his, and sought its return so he could sell the items. Both the magistrate and police prosecutor were highly sceptical of the claims. Tape in the video recorder seized by police showed several jumps by the defendant and his friends, including one instance where a dog tied to a parachute was thrown off a bridge. The magistrate questioned the defendant about the safety of BASE jumping and read to the court an article from the association's website that advised jumpers the best way to reclaim seized property included fabricating evidence of ownership. The author of that article was the man now claiming to own the items held by the court. Ultimately the defendant was convicted, fined almost $5000 and the items were forfeited to the state.[423] Incidents such as this one demonstrate how the line can easily blur between a rescue, a police support incident, and police core business of detecting and responding to crime, and placing offenders before the courts.

Goulburn's Peter Karooz about to abseil the cliff at Cooee Point, with Slot Canyon visible below. This photo was taken during a training day in October 2000 but it is the cliff that Phil Downes belayed down to rescue a BASE jumper in February of that year.

About 7:30am on Friday 31 January 2003 RBDU's Senior Constable Garry Webster was driving out of the Zetland base in a

police four-wheel drive, having completed a night shift and now heading to his home in southern Sydney. Before reaching the main gate he received a telephone call: base indicated they had been advised by VKG of vague reports of a serious train crash in bushland near the Waterfall Train Station, about 40 kilometres to Sydney's south. Although details were lacking and the location was well outside of their rescue area, it was prudent to treat the report as a serious train derailment until such time as detailed briefings could be provided from the scene. On that basis Webster was tasked to urgently respond and assess the scene. If it was a serious derailment the rescue operator could support local rescue services and advise on any heavy equipment and extra personnel required from Zetland.

About 30 minutes later Webster pulled up on a grass verge between the freeway and bushland, well to the south of the railway station. Already present were a couple of police and ambulance vehicles: police radio reports indicated the crash site was about a kilometre into bushland from where the vehicles were parked. Taking a police radio and some basic personal protective equipment with him, Webster eventually reached the crash site where a four carriage interurban Tangara train had sped off the rails, hitting metal stanchions and a sandstone embankment on one side of the curving tracks. The impact of the collision crushed the roof of the first carriage and smashed its walls. The front of the second carriage suffered similar damage, the third and fourth carriages were ripped from the rails and flipped on their sides.

By the time of the rescue operator's arrival many of the survivors were crawling out of the damaged carriages and wandering about. Their escape had been through windows and doors that had been smashed open by general duties police, using large rocks.[424] Amidst the commotion and concerns that damaged overhead wires might be live with electricity, Webster briefly conferred with an ambulance rescue operator who had preceded his arrival by a matter of minutes. The policeman then entered the rear of the last carriage and made his way forward, checking on the welfare of each passenger he came across. Many were suffering from shock, cuts and bruising. Webster conducted basic assessments on each, and when satisfied they weren't seriously injured, he encouraged them to wait for ambulance officers who were on their way.

Eventually Webster entered the first carriage and the worst of the debris. Near the front was a badly injured woman, with bodies of

deceased people in front of and behind her. He spoke to her, assessed her condition and saw that the bodies of the dead were both inside and outside of the train. Webster reassured the woman he would return before he left to find a location where he could communicate with Zetland. Unfortunately the crash site was outside of phone and radio range, so Webster ran back to his vehicle to report his assessment and request additional resources. By this time more emergency and rescue vehicles had arrived so Webster called on ambulance officers to help him carry hydraulic rescue equipment from his car to the train.

What followed reflected many (but not all) of the challenges that police faced at Glenbrook three years earlier. In an increasingly hot train carriage, in a railway cutting with the full sun upon it, rescue operators were unable to use abrasive cutting equipment. They instead used their hydraulic tools, wrestling to manoeuvre their equipment against the train's stainless steel skin. An added complexity at Waterfall was the need to extricate live people who were badly trapped. In the case of the woman that Webster had earlier assessed, the rescue could not be rushed as she displayed symptoms of crush syndrome.

Also in common with Glenbrook and other major emergency incidents, there was an initial over-response of emergency resources. Whereas police were able to quickly gain control at Glenbrook, at Waterfall it took several hours. The absence of radio and phone communications made it impossible to stage or manage responding personnel and resources before they emerged from the bush into the siding. Many personnel self-responded (including volunteer agencies and railway staff) and were unfamiliar with relevant emergency procedures and the interagency incident command system that was then being introduced throughout the state.[425] The result was a lot of people standing around or involving themselves in what amounted to little more than well-intentioned obfuscation. The senior police officer at the scene took the view that:

> 'It was better to let the disorganised process continue. If the various agencies who responded did not act in accordance with a clearly defined pre-existing plan, it was impossible to attempt to establish one at the site.'[426]

Even the military sent armoured personnel carriers from a nearby army base, to assist in carrying out crash survivors through bushland.

This initiative was unsuccessful however as some emergency vehicles had been left locked and parked along the narrow dirt road to the site.

The magnitude of the response was starkly demonstrated to Garry Webster around 1pm when he was told to go home and get some sleep by Ray Constable. Returning to his vehicle, with his white overalls now blackened from the soot and dirt he had crawled through all morning, Webster was bemused by the presence of over 100 emergency and ancillary vehicles (including two landed rescue helicopters) now surrounding his vehicle.

As the last of the 41 injured passengers was removed from the train, the crash was declared a crime scene and a considerable portion of emergency responders were ordered to leave the site. For the following 24 hours police combed the scene, recovered the bodies and remains of the seven victims (the train's driver and six passengers), searched for evidence, and cooperated with investigators from the other agencies that had investigative responsibilities. Throughout this period RBDU personnel remained at the site, working in shifts to support the broader police and multi-agency effort. This included thoroughly searching through and under the train for any further victims and remains, arranging for lighting during the night, and conveying the deceased and equipment from the site using quad bikes and other vehicles.

In an immediate response to the crash the government established a commission of inquiry, headed by the same man who investigated the 1999 Glenbrook crash. In his final report dated Thursday 27 January 2005 Justice Peter McInerney found the crash had been caused by the driver suffering a cardiac arrest as the train accelerated from the Waterfall Train Station. Slumping forward, the static weight of the driver's legs prevented the train's so-called deadman switch from activating – the result being the train kept on speeding up until it eventually veered from the tracks.

McInerney criticised the lack of efficient site control during the early rescue phase, and the inability or unwillingness of some agencies to coordinate their efforts through the police. This notwithstanding, the inquiry chief emphasised he did not criticise any individual rescue worker or emergency official. In fact he believed many police and emergency personnel worked with great courage and dedication.[427] That view was shared by Commissioner Moroney who issued 71 departmental citations and commendations to various

police for their actions on the day and during subsequent investigations.[428] This included a group citation for the Rescue and Bomb Disposal Unit.

POLICING PROTESTS AND DEMONSTRATIONS

The type of support that rescue operators perform during the policing of protests, mass gatherings and demonstrations has evolved as the purpose of such assemblies has similarly changed. Most mass gatherings the Cliff Rescue Squad attended in the 1950s were pleasant or even joyous affairs for the crowds, such as the visit of Her Majesty Queen Elizabeth II in February 1954. For such events the Rescue Squad erected and dismantled barricades and provided refreshments to frontline police. This began to change from the mid-1960s with the increase in political demonstrations, particularly against Australia's involvement in the Vietnam War. While they still provided catering support to larger and protracted police operations, rescue operators often found themselves in the middle of violent protest action.

On Saturday 21 January 1967 Bill Fahey, Doug Coasby and Owen McCaw were patrolling the grounds of Admiralty House at Kirribilli, the Governor-General's official Sydney residence on the shores of Sydney Harbour. Their patrolling was part of major policing operation to preserve the peace surrounding the visit of a senior South Vietnamese military officer. Just after 4pm police noticed a surfboard rider paddling towards them from the vicinity of the Sydney Harbour Bridge. The rider, a university student and anti-war activist who had just been bailed the previous day in Canberra for protest activities, placed himself in the path of an approaching motor launch that carried the dignitary and other officials (including NSW Premier Robert Askin), and he held up a placard indicating the dignitary was a butcher. Fahey and Coasby jumped into an aluminium dinghy, approached the rider and tried to convince him to leave the area. When the man refused to budge, Coasby grabbed the surfboard and attempted to guide it away. Instead the rider lurched forward and grabbed a hold of the dinghy. Police feared he was trying to overturn it so a short struggle ensued during which both Fahey and McCaw jumped into the harbour to subdue the rider. Dragged from the water, the protester was charged.

Doug Coasby grabbing hold of the protester's surfboard, just prior to the scuffle that resulted in all three men falling into the water.

A humorous incident involving an otherwise violent anti- Vietnam war protest occurred during a moratorium protest in Sydney on Friday 18 September 1970. Before the formal start of the protest Bill Fahey (wearing unmarked khaki overalls) stopped to use the gentleman's facilities at an underground train station near the United States Consulate. Upon leaving the facilities the policeman was shocked to find himself amongst a group of loudly protesting anti-war demonstrators, moving to join up with the main group at a nearby park. In spite of his age, Fahey blended in by chanting near the head of the group. Once out of the tunnel, Fahey pointed to the group where they should go. He then moved into the crowd and darted back to police lines when it was safe to do so, and before anyone tweaked to his identity.[429] By the end of that day there would be over 200 arrests with numerous protesters and police injured in what was

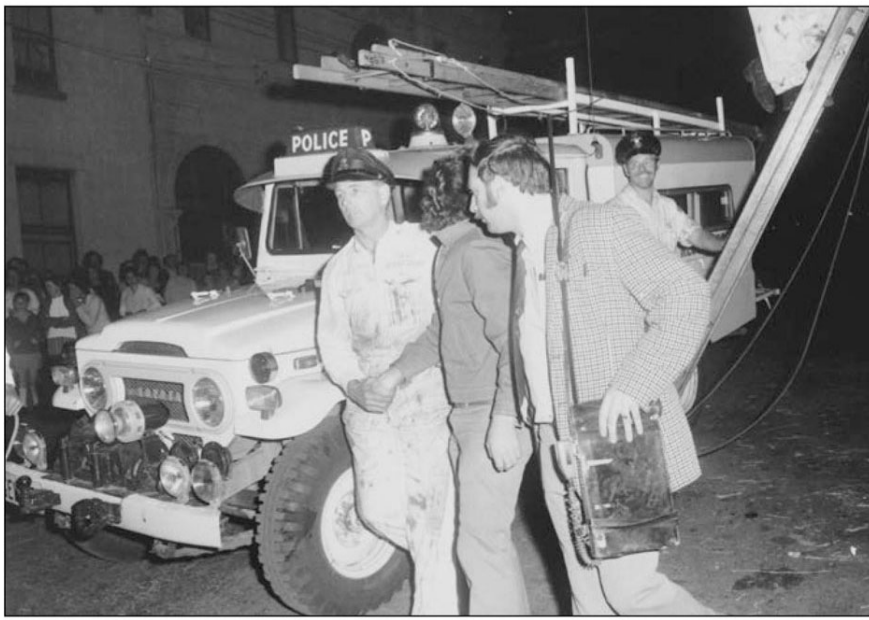
described as the ‘ugliest clashes yet’ in anti-war protests in Australia.[430]

A six-week tour of Australia in 1971 by South Africa’s national rugby union team, the Springboks, was a highly controversial event that attracted strong, sustained and often violent protests by anti-apartheid activists. A large police contingent was required at each of the four representative matches played in NSW.[431] At the match played between the Springboks and a composite Sydney side at the Sydney Cricket Ground on Tuesday 6 July 1971, 600 police (including rescue operators) faced over 2000 protesters interspersed among a larger crowd of 15,000 rugby fans. Even though this crowd was not as violent as at some interstate matches on that tour, countless phosphorous flares, missiles and small packages of tacks attached to exploding fireworks, were thrown onto the playing surface, or at police. Over 55 people were arrested, including some protesters who attempted to cut the goalposts with a saw. Dressed in unmarked blue overalls, wearing caps and asbestos mittens, and carrying garbage cans, rescue operators dodged the missiles to pick up each thrown flare, place them into the garbage bin, and then dump the contents into large barrels at the rear of the grandstands. Afterwards, as the squad rethought their tactics, Dick Lamb came up with a new approach. At subsequent games the squad predug a large number of narrow holes with their post-digger on the perimeter of the field, and dumped piles of sand nearby. During the protests, every thrown flare was picked up, dropped in the hole and immediately covered with sand. It was a remarkably successful tactic to stop the billowing and choking smoke from wafting across the ground.

Dick Lamb wearing asbestos mittens while removing a flare from the field at the Sydney Cricket Ground during anti-apartheid protests on Tuesday 6 July 1971. Photo: Fairfax.

Often police attend demonstrations in which they might personally share sympathy for the cause being protested, but nonetheless are required under law to take action against protesters. One series of such protests was the 'Green Bans' in the 1970s in which unionists and conservationists opposed building development proposals in the historic harbourside areas of The Rocks and Woolloomooloo. On Wednesday 24 October 1973 authorities descended on Playfair Street at The Rocks, to remove demonstrators

protesting the planned destruction of one of Sydney's oldest bond stores. Bouts of violence were plentiful as general duties and rescue police evicted the protesters, many of whom agitated for violence to guarantee media coverage. Hazards facing police included verbal abuse and boiling oil being thrown at them from first floor balconies. In one celebrated instance, Joe Beecroft scaled a tree to confront a particularly vocal protester, who shouted even more loudly when the sergeant (tenuously holding onto a tree branch with one hand) grabbed hold of the man in a delicate area, and persuaded him to come down. A total of 77 people were arrested on the day.



Joe Beecroft escorting a protester who had been in a tree during the so-called 'green bans' at The Rocks on 24 October 1973. Also escorting the man is Constable Dave Kensell from the Police Radio Branch. Gary Raymond can be seen in the background. Photo: Fairfax.

On Thursday 3 January 1974 police took action in Victoria Street, Woolloomooloo, to expel a large number of squatters who were protesting against the proposed destruction of rows of colonial-era housing. Again, rescue operators scaled heights to pull demonstrators from roofs, including those who tied themselves to chimneys. In one case the operators had to dismantle the chimney. At the end to the so-called Siege of Victoria Street 44 protesters were arrested and put before the courts. And while the state may have won such days in

terms of physically evicting people, society won in the longer term when community anger about the situation convinced the government to enact stringent conservation guidelines that prevented wholesale numbers of such demolitions in important heritage areas.

The growth in frequency and complexity of environment-related protests in NSW from the late 1970s onwards, reflected broader national and international concern about the damage being caused by humans to the earth. Undertaking high profile, physical and obstructionist protests, often in remote locations over prolonged periods, became the main way for protesters to agitate for political redress on pressing environmental issues. For rescue operators in Newcastle, Lismore and Cooma, supporting police operations to counter such protests – particularly tackling anti-logging protesters in remote forests – have been a regular part of their duties for decades.

The details, locations and causes of environmental protests differ yet all share similar characteristics. Protesters at anti-logging demonstrations for instance will generally attempt to obstruct, hinder and otherwise stop the activities of logging companies. Their tactics include placing themselves high up in trees or atop tall tripods constructed from wood or metal poles. At these heights the protesters often tie off to the trees or tripods, keep sufficient foodstuffs to last for several days, or instead commence hunger strikes. Other protesters damage or chain themselves to logging machinery, block roads or use improvised devices that lock their arms into the ground – all designed to impede police and loggers. Initially heavily influenced by radical activist philosophies that championed violence and active resistance towards authorities, protester methodologies have evolved and matured in recent decades. As a cohort they are today less likely to use violence, improvised weapons, urine, faeces, acid etc, against police, but still deploy a range of obstructionist tactics. Police tactics have similarly evolved to focus more on peaceful negotiations than forceful detentions, however at each demonstration a point is reached where recalcitrant protesters are arrested or detained, so as they can be removed from the site.

The presence of rescue operators have been crucial in giving police commanders options to counter traps and obstacles laid by protesters, and minimise the dangers associated with arresting demonstrators who have placed or locked themselves in precarious situations. The roping skills possessed by rescue operators enable them to climb trees, negotiate with the protesters, place them onto

police ropes and eventually lower them to the ground. Rented cherry pickers and cranes are also used to gain access to protesters tied to the tops of tripods. Another tactic historically used by police rescue operators to convince hunger strikers, or those long-term protesters exhausted by the elements, to come to the ground is to set up a BBQ up-wind from the tree or tripod. The wafting smells of cooking food can be very persuasive. On more than one occasion though, police have underestimated the throwing prowess of the protesters and have been on the receiving end of missiles containing urine or faeces.

Every rescue operator interviewed for this book, who has undertaken this type of counter-protest operation, has found it challenging and intellectually stimulating. The operations are challenging because they are protracted in nature, often undertaken in extremely unpleasant weather conditions, and can sometimes (but not always) involve dealing with highly passionate protesters unafraid to abuse or harass rescue operators, shout and make noises in efforts to distract them from their duties. Even so, the work can be intellectually stimulating as a great deal of planning and forethought is required to counter some of the more complex tactics and devices used by protesters. Tripods for example can be prone to collapse if handled incorrectly, risking injury to police and protesters alike. Protesters tied to trees often use complex roping or cabling systems linked to multiple points which have to be disengaged in the correct order by police, to safely bring the protester to the ground. Using hydraulic and abrasive cutting equipment can be extremely dangerous when cutting the chains and wires that tie protesters to equipment – if not used carefully the intense heat the tools generate can easily burn a person. The need for delicacy is particularly acute if the chain or wire is attached to the protester's neck.

Ardent protests against the construction of the Timbarra Gold Mine near the northern NSW town of Tenterfield in the late 1990s are typical of what can be encountered by rescue operators. On Tuesday 20 October 1998 Senior Constables Neville Graham and Dave Clarke from Lismore supported a larger police operation to apprehend protesters who were trespassing on the mine site. Seven protesters were atop three wooden tripods and five bipods, made of bamboo poles and about 150 narrow tree trunks, the latter having been illegally cut sown from a nearby state forest. The contraptions were each between four and six metres tall and seemingly flimsy. Upon seeing the rescue operators approaching them, one of the group

placed a noose around his neck, tied the rope to a nearby tree and moved into a position where if he fell, he would hang. On the ground underneath, scores of protesters gathered and one hooked herself to a large cement-filled barrel by locking her arm in a tube that was cemented in the barrel's core. Police risked severing the woman's arm if they moved the barrel before freeing her. Nearby, protesters set up cement-filled barrels with star pickets protruding upwards. It was hoped these would act as deterrents to police afraid they would impale anyone who fell onto them.

Police preparing to move in at the Timbarra Gold Mine protests in 1998. Protesters atop the tripods and bipods were also preparing for the showdown.

The rescue operators methodically set about their task: the female protester was the first to be arrested after they carefully dismantled the device she had locked her arm to. During this process the woman screamed abuse at the police as well as feigned hyperventilation and vomiting. Then, as the barrels with star pickets were removed, and general duties police set about arresting protesters on the ground, two cherry pickers were used to raise rescue operators to the tops of the tripods and bipods. Instead of rushing the man with the noose around his neck, police started to remove items such as hammocks and foodstuffs from the upper parts of the tripods. Frustrated by being ignored, the protester approached rescue operators in one of

the cherry pickers; when he was close enough police pounced on the man and held onto him for dear life. Clarke then used his knife to cut the rope with the noose but during this the protester was able to grab hold of the knife although his hand was badly cut. When lowered to the ground the man was taken to hospital for medical treatment and later charged. With the two main agitators arrested, the remaining group surrendered peacefully and were lowered. Around 40 arrests were made and with the site cleared, police dismantled and destroyed the tripods and bipods.

Increasingly, cat-and-mouse games are played between police and environmental protesters, particularly those in the latter group who spend significant portions of their life pursuing an activist causes. As early as the late 1970s meetings were organised among protest groups to share information and experiences on how to improve their tactics and equipment. The internet has made it even easier to share knowledge, particularly the building of intricate and improvised devices to lock or tie protesters to machinery, trees or even the ground. Most such devices use metal or plastic tube casing and a series of mechanisms designed to fasten the wearer's arm in place, while the device itself is tied to an otherwise immovable object, or cemented into the ground.

The wearers of the devices can easily release themselves however the theory is that it will take authorities hours to dismantle the devices from the outside. However the exchange of information and tactics is not limited to protesters – police have similarly ensured their experiences in countering such devices are shared with colleagues.

Operation Redgum was the first large-scale and protracted police operation to counter anti-logging protests in the Far South Coast of NSW. The operation commenced in January 1989 and lasted for over 12 months, during which time over 1000 protesters were arrested. Scores (and at times hundreds) of police were temporarily deployed to the operation from across NSW, and based in the southern town of Bega. The tactics used by protesters ranged from mass protest activities on key days (including violence between protesters and logging industry employees), to isolated guerrilla protest activities by individuals. Throughout the operation at least one rescue operator from Cooma was permanently attached to Redgum with additional operators from other squads rotated on short-term postings during peak periods. The duties of the operators were wide-ranging,

including lowering protesters from trees, removing the chains that protesters had inserted into logging machinery, transporting detainees, cooking for police, training other police on four-wheel drive skills, and even providing general rescue training to the local SES unit. When protesters started using new styles of arm-locking devices though, and the rescue operators worked out how to dismantle them, a short film was made and distributed to all police rescue units. The educational quality of the film was particularly useful when the devices began to be used at protests in other parts of the state.

Peter Robb (left) with Rob Golding and Neville Graham during a training session on how to safely dismantle tripods.

The advent of the internet has made information exchange a faster process for both protesters and police. On Wednesday 8 June 2011 Newcastle's OIC Sergeant John King was advised of unusual protest activity near a coalmine at Muswellbrook. In an effort to stop a coal train delivering its contents to Newcastle's port, protesters placed a large yellow painted metal box across a railway line and bolted it to the sleepers under the tracks. The box was specifically designed for this type of protest activity – measured to seat into the tracks and large enough to hold a person, computer, water system, solar panel, toilet and provisions. Through his solar powered internet connection, the box's occupant told the media via his computer he would remain there for at least three days, confident that authorities could not unlock the seemingly impregnable (yet cramped) container.

As King and Senior Constables Rebecca Wolf and Shane Cousins drove to Muswellbrook, colleagues at Zetland conducted internet searches and established that other activists had previously used the type of contraption overseas. By the time of their arrival, King and his team had been briefed on the basics of the device and that the record for authorities safely forcing their way into it was about an hour. Under the watchful gaze of local police and senior officials of the coal and rail companies, King examined the outside of the box closely and then began to dismantle it. Within 15 minutes the team were able to reach into the box and pull out its shocked occupant, who subsequently pleaded guilty to a charge of trespass.

Bushland environment protests are less frequent within the Sydney Metropolitan Area. Consequently, police rescue operators are only occasionally called upon to support police at environmental protests of the type encountered by their intrastate colleagues. One such occasion occurred in 1995 when protesters unsuccessfully attempted to prevent the construction of the M2 Motorway through bushland in Sydney's northwest. Though not as large as some previous environment related demonstrations, the M2 protests nonetheless involved the use of wooden tripods and arm locking devices. Rescue operators from Operational Support Units at Pennant Hills, Frenchs Forest and Blacktown were deployed to assist police, along with colleagues from Zetland.

Within Sydney the environmental demonstrations that rescue operators are mostly called to 'spectacular' events designed to attract maximum media interest. This is often best achieved through activities at prominent landmarks such as one of Sydney's two internationally recognised icons, the Sydney Harbour Bridge or the Sydney Opera House. There have been numerous such incidents stretching back to the anti-apartheid protests of 1971, when an effigy was temporarily hung from the bridge.

After dawn on Tuesday 18 March 2003, just two days before the invasion of Iraq by American, Australian, British and Polish military forces, news broke that two anti-war activists had scaled the outside of the Opera House and were painting something at the top of the building's tallest sail. Rescue operators Senior Constables Mick Smith and Wayne Bolitho were immediately dispatched from Zetland. By the time of the pair's arrival, the activists had almost finished painting the words 'No War' in red paint, each letter up to four metres tall. Security guards briefed the police that the two activists

had been seen scaling the outside of the building, eventually working their way to the spine of the sail and then walking up stairs that are recessed along the top of the spine. Neither Smith nor Bolitho had previously scaled the building, but they began an improvised route as security guards were still scrambling to unlock the main hatch that gave access to the highest point of the sail. It took the two police just under 10 minutes to reach the top.

For Smith in particular, the job was surreal. On a gloriously sunny day, he was standing on top of one of the world's great buildings with a postcard view of a beautiful harbour, a vista that included at ground level a growing throng of bystanders, reporters and emergency personnel, looking on to see what would happen. The police cautiously approached the two activists, who were focussed on completing their work before their inevitable arrest:

> 'It was hard not to be impressed to be honest. They had managed to scale the outside of the building with virtually no climbing equipment, and had painted the words upside down. I approached the nearest protester and said "I think you've done enough now", to which he asked for a little more time! I told him his time was over and arrested him. Their efforts in scaling the building showed to me that you are only governed by your fears.'[432]

As is often the case in such incidents there was little friction or animosity between the police and the activists, mutual respect for each other and the need for self-preservation at great heights, encouraged a cooperative descent through a now opened main hatch. Once they returned to the ground the two activists were taken away by local police and charged with climbing and damaging the building. They were subsequently sentenced by a court to nine months of weekend detention and ordered to pay $151,000 in fines.[433]

The incident prompted an urgent review of security for the Opera House and other important installations in Sydney. Smith and his colleagues provided advice to the review team and measures were implemented with a view to prevent future similar acts. Though security at the building is now significantly higher than in 2003, and relies on a mix of physical and electronic measures, it is not impervious. This was exemplified on Tuesday 15 December 2009 when a climate activist group scaled another of the building's sails

and hoisted a banner encouraging Prime Minister Rudd to sign a climate treaty at the pending international talks in Copenhagen, Denmark.

Rescue operators also find themselves called to large-scale disturbances and riots, generated by political activism, deep-seated passion on the part of those involved, or by criminal thuggery. Violence erupted in the centre of the inner-city suburb of Redfern in the evening of Sunday 15 February 2004. Earlier, a 17-year-old indigenous youth had died after falling off his bicycle and becoming impaled on a fence. A story spread that the youth had been fleeing police at the time of his injury, and anger rose within elements of the indigenous community. Within hours of the death, groups of youths and activists began to abuse and intimidate patrolling police. This soon degenerated into the hurling of rocks, bottles and bricks at officers in the street, next to Redfern's railway station, and close to indigenous housing estates. A car was set alight, as was part of the railway station.

At the height of the riot, with police maintaining a shield line to contain the violence to the one street, officers were also bombarded with Molotov cocktails and large fireworks. All available police in Sydney and outlying areas were called to the incident with over 250 eventually attending. RBDU's duty crew of Senior Constables Tom Waibel and Paul Harris were among the first to arrive. Amidst the missiles and explosions, the two assisted many of the 34 injured police to evacuate to the rear and the triage areas set up by ambulance officers. The pair remained at the scene throughout the night except for a brief period when they were called to attend a road rescue (but were called off prior to arrival). In the aftermath of the riot, RBDU worked with several specialist areas to design or enhance tactics and equipment that would better enable rescue operators to support riot police in the future.

Tom Waibel and Paul Harris wearing ballistic vests, helmets and carrying shields, picking up a badly injured police officer during the riot. Photo: NewsPix.

SIGNAL ONE – MEMBER DOWN

Within the NSW Police Force the term 'Signal One' is radio code for a police officer in need of urgent assistance. On countless occasions police rescue operators have responded to such calls either to affect a rescue of a police officer or to provide law enforcement support to other police in need of assistance.

An urgent call for assistance occurred on Tuesday 15 November 1983 when police in Sydney were chasing prison escapee Michael Gardner, who had the previous week overpowered a policeman, stole his revolver and handcuffed him to a tree. Gardner then went on a crime rampage, burgling several houses, abducting then sexually assaulting a woman, then abducting two young teenage girls and sexually assaulting one of them. The man later stole a car after robbing a woman and her son. Driving to work in one of Marrickville's Land Cruisers on the Tuesday morning, Gary Raymond heard police calls for help in chasing the offender along railway tracks in the nearby suburb of Ashfield. Raymond raced to the scene and joined in a foot pursuit, during which police were forced to draw their weapons to stop Gardner. Raymond and a sergeant wrestled the man to the ground, before placing him in handcuffs. The escapee was subsequently sentenced to 18 years' imprisonment, on top of the original sentence he had been serving.

Three years earlier, on Monday 24 November 1980 Forestry workers stumbled across the body of Sergeant Keith Hayden in bushland adjacent to an abandoned quarry on the side of Mount Sugarloaf, near Newcastle. The sergeant had been called to the mountain in response to reports of over 50 shots being fired. He came across a man shooting improvised targets and spoke to him, not realising the man had murdered two men in a gun shop robbery in Sydney in 1977. When the sergeant dropped his guard, he was overpowered and shot dead.

Gary Raymond placing handcuffs on criminal Michael Gardner on 15 November 1983. When arrested, Gardner was in possession of a firearm. Photo: Fairfax.

Having found the body of the policeman laying near his car, one of the Forestry Commission workers frantically used the vehicle's police radio to call for help, and to report seeing a suspect fleeing in another car. Over a score of police patrols urgently rushed to the scene, including rescue operators. Relying on the descriptions provided by VKG, but not aware that the sergeant had been killed, general duties officer Constable Alexander Pietruszka saw the vehicle and approached it when it was stopped in traffic. A gunfight ensued during which Pietruszka was seriously injured. Other police who arrived during the gunfight arrested the offender. Alas, nothing could be done to save Sergeant Haydon.

In the days following Haydon's murder, rescue operators supported detectives by searching bushland surrounding the site, including fully draining a small nearby dam and then searching it with a metal detector. They found a set of keys in the mud, from the Sydney shop, which the offender had dropped into the dam after murdering his two victims. In the years since though, the man continued to visit Mount Sugarloaf to shoot guns, including some he

stole in the robbery gone wrong. The man was later sentenced to life imprisonment for each of his three murders, and 10-years imprisonment for maliciously wounding Constable Pietruszka.[434]

No police rescue operator has died while undertaking a rescue or recovery operation, although this almost occurred in the evening of Wednesday 26 November 2008 when Senior Constable Mark Bieder suffered a heart attack during a road rescue operation on the Sydney Harbour Bridge. In the middle of extricating several trapped people from a vehicle, Bieder experienced a serious backache that soon moved to his jaw, shoulder and eventually chest. Given he had recently passed the annual fitness assessment with flying colours, the experienced rescue operator dismissed the worsening pain as a pulled muscle. By chance, after the rescue he and Senior Constable Mick Hood attended hospital to drop off medical equipment on behalf of an ambulance officer. Whilst talking to nurses, Hood joked that his colleague was having a heart attack. Despite Bieder's protests, a curious nurse performed some tests and told the policeman to come back for the results after he completed another errand. When Bieder returned a trauma team rushed him into surgery, telling him he was about to suffer a massive cardiac arrest. During extensive surgery three stents were placed into an artery and it took almost a year for him to recover and return to work. Two years later Bieder was medically discharged because of the physical damage to his heart. To this day he remains grateful for the efforts of medical staff and of Hood's tomfoolery in front of the nurses.

Tragically, a police rescue operator has died undertaking general policing duties. On Wednesday 11 July 1990 Constable Kenneth Short of Engadine Police Station and a popular member of the Sutherland's Police Rescue, was rostered to work with a probationary constable and a student police officer. Mid-morning, the patrol received a report of a bank hold-up alarm being activated in the nearby suburb of Jannali. En-route to the bank the police car collided with a taxi. The force of the impact killed Short (a passenger) and badly injured the other occupants of the police car and the taxi driver. Rescue operators Senior Constable Gary Skuse and Constable First Class Di Highett from Sutherland were the two who bravely effected the rescue of the junior police, taxi driver and the recovery of their friend. Short's death devastated the family and rocked the morale of the rescue unit for months. The bank alarm had been activated in error.

Another on duty police fatality where rescue operators were involved occurred near Goulburn on a wet Saturday 19 June 2004. A highway patrolman stopped a vehicle to the north of the city and he discovered drugs in the vehicle. The driver was arrested and the patrolman called for additional police assistance. A general duties patrol car sped to assist however it left the road and hit a tree. The passenger in the vehicle, Constable Shelly Davis, was badly injured and trapped. VKG issued a call for Goulburn Police Rescue – one of the duty crew that day was the patrolman who had initially called for assistance. Davis was released from the wrecked police car about an hour after the crash, and rushed to hospital. She died that afternoon. Although the young constable had not been a rescue operator herself, she was well known by the unit as they all worked from the same station.

A signal one emergency rescue with a positive outcome occurred late evening on Sunday 24 November 1991 on the road outside of Caringbah Hospital when rescue operators from Engadine convinced doctors not to amputate the leg of a highway patrolman who was badly trapped in a crashed police car. The vehicle had hit a pole and the officer's foot was partly crushed and pinned by the crumpled floor- well. Rescue operators John Glossop, Constables First Class Steve Papworth and Greg Moon, worked with ambulance rescue officers to carefully pry back the metal and release the foot. During this time the operators had a series of robust conversations with doctors from the hospital who felt it would be easier to amputate the leg. The doctors even set a deadline in which they said they would order the rescue operators to withdraw. With just minutes to spare the policeman's leg was freed. For the police it was a pleasing outcome to an extremely challenging operation.

In April 1991 Senior Constable Lyle van Leeuwen of the Sydney Crime Scenes Unit was involved in a motor vehicle collision in Ultimo, Sydney. The policeman was a passenger in a police car speeding to an urgent incident, when it collided with another police car involved in an unrelated pursuit. Van Leeuwen's vehicle crashed into a pole:

> 'I'll always remember it. I was trapped with broken ribs and feeling quite ill. The rescue truck arrived and within minutes Barry Thompson reached in and said "Lyle, you're going to be okay." It reassured me no end. I knew I would get out.'[435]

Police rescue operators pride themselves on helping others however occasionally they are the ones who need help. Frenchs Forest rescue operator Senior Constable Janine Hausler was on general duties patrol with Constable Steve Black during torrential rain on Thursday 2 January 1992. Called to assist stranded motorists on a major roadway, their police van was suddenly caught in flash flooding – a wall of water swept across the low-lying road with sufficient force to shove the van sideways off the road. With water reaching chest height in the van, the two police scurried through open windows and swam to a nearby tree. There they held onto the branches until floodwaters lowered to a level that they could wade out and reach other police who had come to their assistance.

John Williams found himself in need of rescuing after he became trapped under a collapsed wall in the western suburb of Claymore on Boxing Day 1995. As the on-call member operating Rescue 9 (the lighting truck), Williams attended a house badly damaged by fire and began to shore up the building with a view to lighting it for forensic and photogrammetry examination. When the house had been constructed a load bearing reinforced steel joint had not been seated properly. With the walls in the house now unstable, the joint was precariously placed and easily dislodged as Williams was trying to secure it. The falling beam brought down a significant part of the ceiling on top of both Williams and a firefighter who had been standing next to him. Other firefighters scrambled over the pile of bricks and were able to pull out both men, injured but conscious. The police rescue operator received serious back injuries, which took months to heal. Sadly for him, the back was again injured years later during urban search and rescue training at the site of a former incinerator at Zetland. Unable to return to full operational duties, Williams was medically discharged from the Force.

Goulburn's Phil Downes, Peter Karooz and others suffered carbon dioxide poisoning during a protracted cave rescue on Saturday 3 March 2001. A 25-year-old man had become trapped in a 'squeeze' 12 metres underground within Karabiner Cave B109, located within the Bungonia National Park. Initially pinned by his clothes, the experienced caver became firmly wedged at his shoulder, back and legs, as he tried to manoeuvre through the tight space. Eventually one of the caver's legs became badly trapped in a banana shape.[436] The two police rescue operators reached the caver after a 30-minute descent through a series of tight and twisting tunnels with jagged

rocks and deep crevasses. With only one person able to be next to the caver at a time, various efforts to release the man were initially unsuccessful. While neither Downes nor Karooz are particularly large men physically, they found it difficult to manoeuvre and were greatly helped when joined by VRA operators Katherine Thomas (Berrima) and Di Hopkirk (Binalong). For hours the trapped caver pushed and wriggled his body, moving only millimetres at a time. During this the (police and VRA) rescue operators took turns to cut the man's clothes they could access, so as to give him more space to move. They then pushed and pulled him through the squeeze. Eventually he broke free of his predicament but he needed help to return to the surface.

During their efforts Downes noticed he wasn't feeling right and all in the cave were starting to look bloated. The policeman tried to light a match but it didn't ignite – confirming his fears of a buildup of carbon dioxide. The cave was known for pockets of foul air, the presence of a group of people undertaking physical exertion significantly ramped up the carbon dioxide levels, and each person present began to suffer the early stages of poisoning. The rescue operators had not taken breathing apparatus with them because of the significant effort required to lug the items through the caves, but they did have a small Oxy-viva bottle to administer oxygen therapy to the trapped caver. All had to take turns of inhaling the oxygen and plans were considered by Senior Constable Roger Gough and others at the cave's entrance to pump oxygen below via a series of hoses from the surface. Fortunately the group returned to the surface before they required rescuing themselves. Inspected by medical staff at the scene, both policemen were ordered to stand down for two days to recover and they missed the opportunity to join colleagues the following day at another cave rescue call. The episode, and the injuries to the rescuers, convinced park authorities to permanently close that cave.

The Goulburn, Bathurst and Blue Mountains squads respond to numerous calls relating to people trapped while caving. On Tuesday 9 May 2000 Goulburn assisted in rescuing a firefighter who became trapped while undertaking USAR training in the Argyle Cave within the Bungonia National Park. Phil Downes (left) and the pilot of a rescue helicopter (right) are seen talking to the firefighter just before he is carried from the cave. The pilot was asked to help because of his small build. The rescue operation lasted nine hours and involved five police rescue operators and other support staff.

In 75 years of operations there have been numerous vehicle collisions involving police rescue vehicles, most have been minor in nature with rescue operators and their vehicles happening to be in the wrong place at the wrong time. One evening Shannon Smith and Lisa Camwell were driving Rescue 2 through Zetland, heading to an alarm but travelling at the speed limit. As the truck approached an intersection a utility speed through it from another direction, and slammed into Rescue 2's cabin. Camwell received minor facial injuries and had to force her way out of the damaged truck after calling for assistance on the police radio. Meanwhile Smith, herself in shock but fearing the truck had driven over the utility, got out to check on the welfare of that vehicle's occupants. Inside the badly damaged (but not flattened) utility were three males, each intoxicated. Slumped over the wheel, the driver was initially unresponsive to Smith's attempts to wake him. When the driver did stir, he attempted to punch the rescue operator and when exiting the

utility, he promptly fell to the ground. Police and ambulances units swiftly responded to the call. Camwell was conveyed to hospital for observations while the driver was charged with driving offences, and Rescue 2 was towed away for extensive repairs.

Another crash occurred at the tail end of peak hour traffic to the north of the Sydney Harbour Bridge on Tuesday 11 December 2007. Senior Constable Callum Patton from Zetland was driving Rescue 9 on the Warringah Freeway towards the bridge when he had to swerve to avoid hitting a truck that suddenly pulled into his lane without warning. The shift in the centre of gravity and rolling momentum of the police truck was enough to dislodge the roof-mounted lighting boom, which in turn acted as a counter weight when Patton tried to correct the vehicle's steering. Within a split second the eight tonne Hino fell onto its side – Patton was slightly injured when contents within the cabin, including a ballistic vest, hit him. Shaken and a tad annoyed by the situation, by the time he radioed for help and then climbed out of the cabin, the smaller truck had driven off. The crash caused traffic mayhem for two hours until a crane arrived and righted Rescue 9. Checks of traffic management cameras revealed footage of the crash but not the details of the registration of the truck that pulled in front of Patton. Formally cleared of wrongdoing, Patton nonetheless endured the inevitable black-humoured ribbing from his colleagues. One of them highlighted that Patton just had to wait-out the notoriety of the incident, as inevitably someone else in the team would similarly distinguish themselves at some point in the future. Just a few weeks later it was that colleague who was involved in such a crash.

Possibly the most violent criminal act in which police rescue operators (in their general policing role) were targeted, occurred to the south of Bathurst on 30 March 1986 – Easter Sunday. Bathurst police were called by a local resident who was concerned about her 45-year-old son, a paranoid schizophrenic with a history of violence and who was acting erratically towards her and others. The man was seen driving his utility and failed to stop when directed by police. A pursuit commenced.

At that time some police were preparing to start duty at a convent in the small town of Perthville, 10 kilometres south of Bathurst. About 80 officers from various stations throughout the state were billeted at the convent during the Easter period to assist in policing large crowds at a series of motorcycle races at the nearby Mount

Panorama racetrack. Sergeant Third Class John Byers (a rescue operator from Sutherland) was rostered to start work later in the day. When news broke of an approaching pursuit, Byers and two other police hurriedly obtained their duty belts, handcuffs and revolvers, rushed to a Ford F100 paddy wagon and drove a few hundred metres into town. After a few minutes the pursuit approached; the offender's utility followed closely by two police sedans.

Within seconds of joining the pursuit the F100 accelerated to move in front of the utility, so as to force the offender to slow down. Instead, the utility rammed the police vehicle, jamming shut its front passenger door (which Byers was sitting next to). Both vehicles then skidded to a halt as the utility was shunted into the metal railing next to a small bridge, across the road from the town's pub.

As this was occurring Byers looked into the utility and saw the offender starting to motion towards the policeman while raising a .303 calibre bolt-action rifle. With the rifle pointed at him, Byers made a split-second decision; he started to exit the vehicle through his opened window, grabbed the rifle barrel and forced it away as the offender pulled the trigger. The round penetrated the side of the paddy wagon, but it did not hit any police.

With both vehicles shunting to a halt as they hit the bridge, Byers and the offender fell and hit the ground hard. At the same time the two police sedans screeched to a halt just behind the utility, to prevent it from being able to reverse away. The offender was the first to regain his balance and he raised his rifle. Instead of shooting Byers he turned the weapon towards Constable First Class Paul Quinn, who was rushing towards him from one of the police cars. The policeman was shot in his left clavicle and fell to the ground, dead. The offender then turned his rifle towards the other police car and shot its front passenger, Senior Constable Ian Borland. The constable received horrendous leg and thigh wounds but could not escape from the car.

There were two other Bathurst policemen in the car with Borland, the driver Sergeant Allen Ashe and back seat passenger Senior Constable Bob Cooke, a general duties member and a part-time rescue operator. Cooke scrambled out the back seat of the car as the offender shot at him; the policeman dived onto the road and frantically rolled across it until he found partial cover.

By this stage other police, including Byers, had sought cover as best they could, drawn their revolvers and were firing at the gunman. Although being hit several times, the offender got to his feet and

scampered for cover down an embankment next to the bridge. From there he resumed his shooting spree, shooting Constable Borland again as he ignored even more shots from police. During the exchange in gunfire, and in plain view of the offender, Ashe reached back into his sedan to drag Borland from the vehicle and place him behind the car until the gunfire stopped. Meanwhile, just metres across the road, patrons in Perthville's pub scrambled for cover as they were in harm's way from ricocheting .303 rounds.

In total, police shot at the offender 18 times. Seven of the rounds hit the man but none disabled him. For his part, the offender decided to throw his gun away and give up only after he ran out of ammunition. Closest to the offender but behind the metal railing next to the bridge, Byers seized the opportunity to run at, subdue and then handcuff him. It took time for ambulances to arrive; both injured men were taken to Bathurst Hospital. The following day the offender was charged with murder and serious wounding. He later pleaded guilty to manslaughter on the grounds of diminished responsibility and was sentenced to life imprisonment and 127 years, but was paroled in 2004.

The failure of police bullets to disable or kill the offender prompted a major departmental review. Firearms training procedures were amended[437] but the main problem had been the ammunition itself. As Byers recalled:

'We might as well thrown buckets of sand at this bloke.'[438]

The bullets used by the police were based on military munitions that could pierce a body yet cause relatively minor injuries. Before the end of the year, police throughout the state were issued with new ammunition that had a higher rate of velocity, but were designed to mushroom on impact and remain inside a body (increasing the chance of a disabling hit). When publicly announcing the new ammunition, Police Minister George Paciullo specifically cited the circumstances of Paul Quinn's death as prompting the change.[439]

A single parent of young children, Paul Quinn had only the week before his death transferred to Bathurst so they could be closer to his parents. He was buried in Bathurst with full police honours on Wednesday 2 April 1986, posthumously awarded a Commissioner's Commendation for Bravery and promoted to Sergeant Third Class. Ian Borland never fully recovered from his injuries although he remained in the Force and was promoted to inspector prior to retiring

in 2008. Departmental awards and acknowledgements were issued to several police present at the scene; both Byers and Ashe were also awarded Australian Bravery Medals for their actions.[440] Despite the accolades, all involved often think about their fallen colleague and the terrible impact his death had on family and friends.

A ROPE AND A PRAYER TRAINING AND SELECTIONS

The attitude towards training manuals and classroom learning in the squad's formative years was succinctly summed up by Ray Tyson:

> 'Rescue has a great deal to do with experience and I don't feel that you can learn rescue out of a book. A rescue manual can teach you how to use your tools – sure. It might even show you certain facets of rescue, but no manual can ever cover all the situations you meet. And it's only by experiencing rescue and doing it yourself that you'll become what I'd term an experienced rescue operator.'[441]

Until the late 1970s there was very little formalised rescue training delivered within the Force, apart from Ware's basic training course on the use of the Cliff Rescue Machine. Even that training stopped during the 1960s; learning for new rescue operators was almost totally experiential under the very close and watchful eye of senior squad members. Peter Robb, a constable in the 1960s who also had military roping training, was one rescue operator who learned hands-on through 'old school' methods:

> 'Bill Fahey would whack you over the back of the head it you did it wrong. I got one, tying [an incorrect] knot on the cliff machine!'[442]

When not in the field or delivering civil defence briefings during the 1960s, operators trained with their equipment, whether it be using hydraulic equipment on old cars at wrecking yards, setting up and dismantling the Cliff Rescue Machine on the parade ground, or erecting and testing flying foxes tied between radio towers at Redfern. Knot craft was also practiced extensively, with new team members learning the hard way from their seniors that the word 'knot' was forbidden – they were instead 'bends' and 'hitches'. Ad-hoc formal training opportunities were occasionally provided on topics such as how to use oxy-acetylene tools, how to drive four-wheel and heavy vehicles, advanced civil defence theory, rigging, and even photographic interpretation (to assist in land searches). These courses were provided either by the private sector, other police teams, the

military or the Civil Defence Organisation. During this era, after three or so years, rescue operators would be declared by the OIC as being sufficiently experienced to be classified as an instructor, and then eligible to receive a per-diem allowance in recognition of the technical competency.

Harry Ware providing guidance to a policeman during cliff rescue training in September 1953.

The three-week basic rescue operators course developed in 1977 by Bill Fahey, Bruce Gane and Dick Lamb (with the support of others), was not in itself antithetical to the squad's philosophy on the value of theoretical training as opposed to hands-on experience. It was simply recognition of the reality that a rigorous, robust and effective course had to be developed to support the massive expansion in numbers of rescue operators from a few handfuls to over 200 in just a few years.[443] It was impossible to rely solely on transferring knowledge through a few highly experienced operators in the field.

Since 1977 the basic course has evolved to reflect changing thinking on training principles and best-practice standards. Relevant considerations have included the growth in the amount and complexity of equipment used, the availability of funds, the numbers

of available training staff,[444] and evolving legislative requirements for both the delivery of training and workplace safety standards. Consequently, the course has lengthened. From three weeks in 1977 it expanded to four in the early 1980s and then to six by the early 1990s.[445] The most substantial change to the structure of the course was made in the 1980s when the majority of roping training was repackaged into an advanced course for operators to undertake about two years after they obtained their rescue operators certificate. This experiment was reversed when it was determined that it was more efficient and effective to have roping taught as a core skill during the basic course.

Rescue operators experience the effects of downwash from a PolAir helicopter during a training exercise on an advanced roping course in the 1980s.

In many respects the most significant changes made over the last two decades for the training of new personnel is not the course itself, but how police are selected. In the 1960s and 1970s the selection process to join the squad was a highly subjective process – an assessment by Ray Tyson of what skills the prospective applicant could bring to the team and how he would fit into the group. Factors such as where the applicant lived could be as an important factor as aptitude, as Tyson liked to have at least two operators living in the same suburb or near each other, in case of after-hours callouts. When the squad expanded and the de-cents commenced operations, this

high degree of selectivity had to be abandoned and vacancies opened to any policeman (and later, woman) interested in applying.

Aptitude assessment for applicants focussed on physical strength (the ability to pick up heavy rescue equipment, climb ladders etc), dexterity and mechanical aptitude and rudimentary phobia testing. Acrophobia was tested for by scaling a tower (often the radio tower at the Sutherland Police Station). Claustrophobia was assessed by having applicants don breathing apparatus with a blacked-out visor, then having them complete an obstacle course 'blind' but with instructors verbally guiding them. These tests also gauged the ability of the applicant to control anxiety and follow orders under stress. A degree of subjectivity was retained in the process with applicants being interviewed by senior personnel (though not always rescue operators), before being endorsed to undertake training.

An applicant being tested for claustrophobia as well as his ability to follow directions and trust his colleagues. Wearing a blacked-out visor, the policeman had to rely on verbal directions by instructional staff, and by feeling his way through an improvised obstacle course that was set up (in this case) at Marrickville.

The calibre of prospective recruits was something never far from the minds of the squad's leadership group, as Bill Fahey noted in a 1983 documentary:

> 'There are some I'm afraid that would like to join the job for the publicity, they like their photos in the paper. And again unfortunately we have people who think that the Rescue

> Squad is a little knothole, for want of a better word, that they can bury themselves in for a number of years and get away from normal police duties. This is not so.'[446]

A noticeable trend during the 1990s was an increase in the numbers of police who left rescue duties a relatively short time after successfully completing training.[447] Many found the work either too confronting, too boring or not what they had envisaged. Several also did not perform to the standards expected of them. Whether it was an unrealistic expectation on the part of those police as to what rescue duties entailed (in part influenced by the media and the television show *Police Rescue),* or a case of rescue units not adequately pre-briefing prospective recruits on the rigours and the unglamorous elements to their business, the end result was an attrition rate that sapped unit capacity and frittered away limited training funds. It was also unfair on the individuals concerned. Changing workforce demographics within the Force during the 1990s also began to shape the type of people applying to become rescue operators. The numbers of qualified tradespeople and ex-military personnel joining the Force began to decline in the 1990s, which reduced the pool of people with trade or related skills that could be easily applied to rescue and bomb operations.

These developments encouraged a small group of RBDU members to agitate for change to the selection process for new personnel. Senior Constables Rob Golding and Mick Smith in particular felt the existing aptitude testing regime didn't adequately push applicants to demonstrate their capabilities in areas such as teamwork, dedication and perseverance. In early 2000 the two police were given approval to introduce a more challenging series of physical and aptitude tests for applicants, over a two-day period. Previously a member of a tactical policing team, Golding reasoned that the tests were to see if the applicant was prepared to give a bit more to join the team:

> 'It wasn't about seeing who was the fittest or strongest, it was to see who was fair dinkum and had a heart. We didn't want complainers or those who were looking for a glamorous job. Instead it was those who would help their mates, who would work as a team and who would dig deep when the going got tough. Most applicants have some fear or hesitancy at one or more of the tasks asked of them. Those that can push through this fear and hesitancy, and do what was asked, are the ones

> we were looking for. Rescue skills can be taught – these characteristics cannot, and they are what make a good rescue operator.'[448]

The exercises included having the applicants run around the Zetland base in groups for several hours without rest, carrying a stretcher containing a weighted dummy. The pace of the run was not fast but the group had to traverse obstacles ensuring the stretcher didn't touch the ground. As the group ran with the stretcher each person would take a turn to stop and undertake their phobia testing. Another phase was conducted near Watson's Bay, where the group had to swim fully clothed, with the stretcher for an extended period, helping each other to keep it afloat.[449] Other tests included climbing onto shipping containers to undertake simple mechanical tasks such as sawing logs of wood at nominated lengths without the use of a ruler or measuring device, walking on aluminium ladders that were placed horizontally between two high points, and having applicants reach into a dirty and apparently well-used toilet bowl to search behind the u-bend for hypothetical evidence.[450] Physical testing was also expanded from simple tests of strength to include aerobic fitness (running, push ups etc), with pass levels set higher than those for general duties policing.

The selection regime has continued to evolve in the last decade, but not significantly. Today it consists of a three-day series of physical and psychological tests. Applicants must complete shuttle runs, push-ups and other routine physical and psychological tests before undertaking phobia testing, including the time honoured exercises of tower climbs and wearing breathing apparatus with blacked out face masks in confined spaces. With a now-dearth of tradespeople in the police, additional scenarios have been introduced to assess an applicant's life experiences and mechanical aptitude, along with the potential to learn new skills and re-learn existing ones. Seemingly simple tasks such as taking a ladder off a truck, setting it up against a wall and working out the best way to saw differently shaped wooden items, are done under pressure induced by constant physical exercise during the day. Another proven test is to divide applicants into groups of three and have each group carry a very heavy bag containing 300 metres of rope up internal stairwells to the top of Sydney Tower. Each group is assessed as to how the applicants support, lead and assist one another. Key character qualities sought are persistence, leadership, teamwork, mechanical aptitude, logical

reasoning and a preparedness to push through psychological barriers. Promoted to the rank of Senior Sergeant in 2011, Mick Smith is currently responsible for all RBDU training:

> 'It's not a case of bastardisation but we are trying to put some physical and psychological stress on applicants. This is so we can get insight into how they think and act under pressure. It's not just about being able to do a task, it's how they do it, whether they give up, or put in more effort than the minimum requirement.'[451]

The basic rescue operators course in 2017 is six weeks in length with (ideally) a class size of 10 or 12. The successful completion of an advanced first aid course is a pre-requisite, as is the completion of a number of distance learning modules on topics such as basic rescue principles along with police powers and responsibilities under the *State Emergency and Rescue Management Act 1989*. The course itself, like those delivered in the late 1970s, consists of a series of intensive learning and practical training sessions on topics as diverse as roping, road rescue, breathing apparatus, land search, dealing with protesters and the use and maintenance of equipment such as chainsaws and hydraulics. The pass marks for all exams is 80 per cent, another element of training that has remained unchanged since 1977.

Those who successfully pass training are awarded a rescue operators certificate and then return to their police stations. Wherever possible, Sydney-based graduates are rotated through RBDU on short-term postings to gain experience and to enable management to see firsthand how they perform outside of the classroom. Permanent transfers to RBDU are offered when vacancies arise. Those police who return to a police station in an area that has a de-cent, are automatically deemed to have joined that unit. Graduates who are not attached to either RBDU or a de-cent, are encouraged to apply for a transfer, but have to wait for vacancies to arise.

For new rescue operators transferring to RBDU, they commence a four-to-five year period where mandatory training requirements include the successful completion of a two-week bomb appraisal officer course (about 18 months after they join RBDU) and then a six-week police bomb technician course (about six-to-12 months after the appraisal course). The gaps enable operators to develop their skills and experience in duties for which they have trained, and to gain

exposure to bomb duties through observing and working with experienced technicians. Both bomb courses meet the standards required by the Australia New Zealand Counter Terrorism Committee (ANZCTC). The bomb appraisal course is conducted by the RBDU and delivered to a mix of RBDU personnel, rescue operators from the de-cents and selected police from other areas of the Force. The bomb technician course is provided often on a joint basis between RBDU and other Australian police bomb squads; it is the successor course to the one previously delivered by the military between 1971 and 1999. More advanced ANZCTC training in bomb response duties, particularly in relation to the use of explosives to assist tactical police teams when storming buildings, is offered on a limited basis.

Other training undertaken by new rescue operators (both RBDU and de-cent personnel) in their first years include short courses on how to drive four-wheel drive and large vehicles in routine and emergency situations, how to drive all terrain vehicles, and swift water technicians training. This latter course has been developed in recent years, in recognition of the likelihood of operators attending calls of people being swept away in fast moving waters (floods and rivers). Small boat, trail bike and other niche courses are also offered.

Police rescue operators undergoing swift water rescue training in Sydney in 2017. Up until the 1990s swift water training was virtually non-existent in any of the state's full-time rescue services. From the 1990s onwards training began to be delivered, initially in an ad-hoc fashion. In the 2010s courses are regularly delivered, are physically demanding and are instrumental in enhancing the skills of rescue operators.

An area of training that has received enhanced attention since the turn of the century is search and rescue, particularly in bushland. In the late 1990s it was identified that rescue operators received insufficient training to coordinate multi-agency searches. Police also received periodic criticism of the way that some search and rescue operations were conducted. In 2001 a land search course was conducted for a group of police rescue operators and general duties police in the Snowy Mountains town of Jindabyne. The week-long course was delivered by a highly experienced search coordinator from the Queensland Police Service. Subsequently tailored to suit NSW conditions, the course has been delivered on a regular basis by police rescue instructors to a mixture of new rescue and general duties police in areas where search and rescue operations are common. The limited number of places for NSW Police on National Search and Rescue courses are prioritised to sergeants and team leaders from both land rescue and water police.[452]

Along with learning new skills, all operators must maintain the

currency of their rescue qualifications under the requirements of the State Rescue Board. For police rescue operators this is done through a series of training days with operators completing each six months a minimum of 24 hours of general land rescue training and an additional eight hours of vertical training. Multi-agency training sessions are undertaken where possible, including with private industry groups such as Mines Rescue and the various helicopter rescue organisations that operate in NSW. Major interagency exercises are held periodically to test response capabilities to mass casualty events. Additional police-only recertification training is undertaken on a yearly basis for officers to maintain their efficiency in weaponry and conflict de-escalation tactics.

Above and previous image: Members of the Blue Mountains and Western Region Police Rescue Units conducting joint training in the Blue Mountains in late 2016.

All long-term police operators are expected to develop their skills to a level where they can become instructors. This is critical as the two full-time instructors at RBDU are incapable of coordinating, oversighting and delivering the training for all operators. Having a high percentage of operators with registered training qualifications is not just beneficial for the provision of training within the teams, but is also useful for when they are called upon to deliver, oversight or assess the training of other agencies not just within NSW, but also in other Australian jurisdictions and beyond, such as in 1985 and 1986 when training was delivered in Western Samoa, and in 1987 in Papua New Guinea.

OFTEN GRIZZLY WORK – CONCERN FOR WELFARE CALLS

One of the more unpleasant calls for any police officer is to check the welfare of someone who has not been seen for some time by family, friends or neighbours. If the person is elderly or infirmed, and there is an unpleasant smell emanating from the person's house, police invariably prepare themselves for the likelihood that once they force their way inside, they will find a dead body. If the smell is exceptionally gruesome or if a premises is particularly difficult to enter, Police Rescue are called.

In the late evening of Thursday 21 May 1981 Marrickville's Barry Thompson, Allan Wade and Garry Thornton arrived at a house in the suburb of Newtown, where local police needed help. An elderly women who owned more than 20 dogs had not been seen for some time, many of the animals could be heard yelping from inside and the stench wafting from the house was almost overpowering. Wearing breathing apparatus, Wade and Thompson used a crowbar to break open the front door. They then immediately walked into ankle-deep levels of dog excrement that extended throughout the house. At the rear of the house lay the body of the woman and a carcass of one dog, both had been partially eaten by the surviving canines.

Another horrific scene awaited RBDU's Mick Smith and Gary Morgan on Tuesday 12 November 2002 at a unit in the north-western suburb of Denistone. There a man had committed suicide by taking a bath and electrocuting himself by placing a radiant heater into the water. Over subsequent weeks the slowly dripping bath tap eventually filled the tub, the water spilt over and began to flood the unit and the unit below. Eventually police were called. General duties police forced open the front door but the foul, toxic air immediately repelled them. The smell soon permeated the street, and could be smelt by the rescue operators as soon as they opened the doors of their truck. Wearing breathing apparatus and splash suits, Smith and Morgan searched the unit for evidence. After photographs were taken and items seized, the two set about draining the bath as delicately as possible. The state of decomposition was such that the maggot-filled water had the consistency of soup. It had to be scooped with pans

and ladles, and emptied down the toilet. The removal of what remained of the body was a protracted and particularly unpleasant feat, given the ease at which parts of the body disintegrated:

> 'It was the most disgusting and horrendous incident I have attended. While we couldn't smell the stench because of the breathing apparatus, we still dry-retched at the sight of the body and the soupy water. It was right out there as far as these types of jobs are concerned.'[453]

Called to a similar situation in Bondi on 5 May 2009 Constables Marcus Backway and Callum Patton from RBDU were faced with the badly decomposing remains of a man around a toilet. After examining the room the police returned to Zetland to obtain heavy-duty gloves, rubber boots and other protective equipment. The two however forgot to pack spare sets of overalls. Almost inevitably, their clothes became contaminated with fouled remains and had to be sealed in a HAZMAT bag at the scene. The two then drove to a nearby hospital to dispose of the bag, wearing nothing more than their underwear. In a pre-arranged plan with hospital staff, the truck pulled into the building's car park where the bag was passed through the passenger's window to hospital technicians. As the technicians burned the bag and its contents as the two somewhat under-dressed policemen swiftly returned to Zetland to obtain replacement overalls. Fortunately for them (and the public) they were not diverted to a rescue call during their dash for dignity.

Constables Richard Walsh and Chris Tegart from the Illawarra (Wollongong) unit almost suffered serious (potentially life threatening) injuries at a somewhat peculiar welfare check incident in a house at Mount Warrigal in 2009. There the bloated and partially decomposed body of a man was found, sitting in a chair but slouched with his head against a wall. Only the man's back was visible at first glance. Wearing breathing apparatus because of the rancid smell, the police and a forensics officer were about to pull the body away from the wall when something caught their eye – a half eaten hamburger on a coffee table. Something wasn't right. Whereas the body's state of decay suggested the man had been dead for quite some time the hamburger was relatively fresh with no mould or fungus growing on it. The police regrouped outside to talk through their observation. Detailed checks with police files indicated the man had previously attempted suicide and an inspection of the house's

fuse box revealed a jury-rigged override so the fuse could not activate in case of a short-circuit. Now deeply suspicious, the rescue operators cut all power to the house and again entered. Delicately pulling the body from the wall, Walsh and Tegart saw copper wires wrapped around the man's wrists, connected to the power point. He had electrocuted himself; the constant electrical charge heated the body, rapidly hastening the decomposition process and contributing to the smell. Had the police not noticed the hamburger, stopped and reassessed the situation, they would have likely been electrocuted themselves when they touched the body.

Every rescue operator has attended memorable check welfare calls. Not all have involved the dead. One of the more unique incidents for RBDU's Shannon Smith and Mick Smith occurred in the suburb of Mascot where an extremely morbidly obese man was ill and required hospitalisation. Paramedics had tried to lift and move the man on their stretcher but to no avail. After lengthy discussions the police returned to the base at Zetland to obtain an industrial trolley and a flatbed truck that had a canvas structure over the rear tray. Back at Mascot the operators tied the man onto the trolley and carefully manoeuvred it through the house, a difficult task given the man's girth.[454] Eventually outside, the paramedics discovered their patient could not fit into the ambulance. Instead, he was hoisted onto the rear of the flatbed and conveyed to hospital. Some months later the squad was again called to the house and they provided similar assistance to paramedics, but on that occasion a larger ambulance was dispatched and transported the patient to hospital.

In the early afternoon of Monday 4 February 1976 Joe Beecroft, Gary Raymond and Bruce Gane were called to an apartment block in the harbourside suburb of Potts Point, where concerns were held for a woman known to suffer from a psychological illness. By the time of their arrival it had been established that the woman was alive inside her third storey unit but she was suicidal and threatening to jump out an opened window if police came through the front door. A plan was devised in consultation with the woman's physician that Raymond would lower himself by rope from the roof to the window, so he could quickly enter the apartment and grab hold of the woman. Beecroft would follow and unlock the front door to allow the physician and some of the woman's friends in, so they could speak to her and calm her down.

In August 2005 police were called to search for an elderly man suffering from a psychiatric illness, near Goulburn. The man was eventually spotted by PolAir, trapped in a fence on a rural property. This is a photograph of the forward command post, with search maps on the side of a Hino rescue truck (call-sign Rescue 80). John Sheehan from Goulburn's Police Rescue and Robert Bell from the SES are in attendance.

The plan started promisingly but soon went awry when the woman saw Raymond, as he was about to swing through the window. She unsuccessfully tried to push the policeman away and then hurled several bottles at him. For his part Raymond was only partially through the window, at risk of falling to his death, struggling for balance, and attempting to grab hold of the woman to stop the violence. Breaking free of the burley policeman's tenuous grip, the woman raced into the kitchen and returned carrying a carving knife. She tried stabbing Raymond and then cutting his rope. Throughout all of this her screams filled the air, as did the Raymond's shouts. Fortunately, he was able deflect the stabs and the rope was resilient enough not to fray when the knife hit it. Within a few seconds he was able to fully enter the unit and grab hold of the woman with both hands. Beecroft entered soon afterwards and opened the door. A visit to hospital for observation was required after the woman settled down but again exploded in rage and attacked one of her friends.

Tony Malone is another rescue operator who, like Gary Raymond, attended a check welfare call but who ended up facing a life-threatening event. In 1989 the senior constable and Sergeant Mark

Powderly were called to a third storey unit by paramedics who were concerned for the welfare of the unit's sole occupant, an elderly female immigrant. The woman did not answer when the paramedics had knocked on the door. No noise could be heard from inside, she had not been seen for some time, and a faint yet unpleasant odour wafted from the unit. Not wanting to damage the front door the slimly built Malone volunteered to shimmy up the drainpipe and enter the unit's opened toilet window. Expeditiously climbing the wall, the policeman called out through the window and when there was no reply, he crawled through it head first. Once inside, he began his search by entering the nearby main bedroom. In the middle of the bed was a human-sized lump under the blanket. Expecting to find the woman dead, Malone was surprised to discover that it was instead a large amount of clothes. When he turned around to resume his search, the policeman was stunned to see an elderly but clearly enraged woman standing in the bedroom's doorway, armed with a large carving knife and screaming obscenities.

Malone slammed the bedroom door shut as the woman made her first strike yet the knife penetrated the door with ease. She continued her tirade and attack. For his part, the rescue operator did his best to wedge the door while screaming to his colleagues that the woman had a knife. His attempts to calm her down were fruitless; she continued to pound the door and it began to disintegrate from the repeated knife strikes. In the fleeting seconds he had, Malone began to think about where else in the room he could retreat to when (not if) the door finally gave way.

Meanwhile Powderly raced to the rescue truck to obtain a sledgehammer; he and the paramedics then broke down the front door and entered the unit. Still enraged, the occupant turned on them, giving Malone an opportunity to escape the bedroom and race into the living room, but she stood between him and the front door. Instead of drawing their batons or firearms, the police grabbed chairs and stools. The paramedics did likewise. They surrounded the woman and used the legs of the chairs and stools to pin her and her arm. Partly immobilised by this, the woman was unable to swing her knife and it was soon taken from her. She was subsequently taken by ambulance to hospital for psychiatric evaluation. It was a relatively peaceful end to an incident that could have easily resulted in a policeman being seriously wounded or worse, or an elderly woman being shot by police in self-defence.

THE HARROWING

A few days after the 2 December 1999 Glenbrook train crash in which seven people died, Springwood's rescue operators found themselves drawn to their equipment shed at the rear of the police station. Whether on or off-duty, the men spent hours at a time servicing the equipment that had been used in the operation, engaging in small talk and conducting a general tidy- up. No directive had been issued for this to occur, it just happened. Eventually one of the group mentioned that in his sleep he was constantly dreaming about trains and counting seven victims. The others were stunned because they were also having similar dreams or nightmares in which trains, the victims or the number seven figured prominently. For most, the dreams stopped recurring soon after they openly talked to each other. The realisation that they were experiencing similar thoughts, was sufficient to enable them to put the tragedy into perspective and move on. The episode was nonetheless a salutary lesson to the group about the psychological impact of their work and the risks associated in not identifying and appropriately dealing with the critical incident stress that accompanies their work.

It was known and accepted among police from the earliest days of the Cliff Rescue Squad that their work was not just physically dangerous but it was often gruesome. Nevertheless the police were expected to get the job done and then move onto the next task without complaint. This mindset was a fundamental component to the Rescue Squad's legendary reputation as an elite band of hardened men (later expanded to include women) capable of confronting the worst of horrors with minimal or no fuss. Such a reputation of course makes no allowances for the realities that the operators are human beings placed into the most confronting of situations, and then have to deal with the long-lasting psychological consequences of those experiences.

Just prior to his retirement Ray Tyson spoke to reporters about his career that had seen him involved in the saving of about 1000 people, and recovering the bodies of many hundreds more. An accomplished public speaker and deep thinker about the utility of rescue work, Tyson alluded to a crucial aspect that was then seldom openly discussed – the psychological impact of their duties:

> ‘You don’t get hardened to people’s sufferings, but you do have to switch off your feelings as long as the job lasts. When the job is over, then you think how horrible it was. You must switch off to be efficient or you might even panic and doubt your abilities to do the job. And then you would be no use to anybody.’[455]

In a 1983 film documentary about Police Rescue titled *Encourage Them to Cry,* Bill Fahey provided his perspective:

> ‘I’ve had many [people] over the years that have died whilst we have been trying to free them. ... It doesn’t register really at the time. [It registers] possibly the next day or that night when you’ve calmed down, you’ve had a warm bath, you’re laying back and you start to think. It registers then.
>
> The worst feeling you can have is when children are involved [either in rescues or police support work where children are victims of horrible crimes]. Those are the ones that effect me the most.’

What Fahey didn’t say in the documentary, but which he did admit after retirement, was that the stress of 30 years of rescue work took its toll and he regularly suffered nightmares and flashbacks. What he saw under the bridge at Granville in particular gave him visceral dreams and nightmares whose intensity and frequency only began to diminish well into his retirement.[456] Cruelly, the public service Fahey dedicated his working life to, caused him significant psychological harm.

Even the legendary Harry Ware experienced periods of fear and panic, despite his carefully cultivated reputation as being unperturbed by the dangers of rescue and recovery work. Ware genuinely held no fear of heights, but occasionally confessed to episodes that caused him to seriously ponder the risks. One instance was a body recovery from the shoreline of a Sydney cliff, where the surf pulled the sergeant under:

> ‘I experienced the most paralysing sense of fear I had ever known. My legs were held in a vice-like grip. I tried to kick myself free, but the long, clutching tentacles seemed to have terrific strength. I struggled against panic and desperation. I had no knowledge what gripped me, but thought that it must be some deep-sea creature that had been brought in-shore by the high seas and was now lurking in the pool until the tide

made way again. After several seconds, I suddenly broke free. ... Cold, though the sea was, I found myself perspiring .. ,'[457]

All experienced rescue operators have memories of tragic or horrendous jobs they would prefer to forget, but which periodically resurface for one reason or another. Tony Malone often reflects on recovering the body of a murder victim from a small dam near the M4 motorway in western Sydney. Twenty-year-old building society worker Janine Balding was abducted from Sutherland Railway Station by a group of young teenagers on Thursday 8 September 1988. The woman was taken to the then semi-rural area of Minchinbury where she was robbed, assaulted, raped and tied up, then dragged over barbed wire and left to drown in the dam:

> 'And that's one [case] I think about a lot because ... I drive past that scene quite often and as soon as I get to the Archbold Road overpass signage on the M4 it just brings back flashbacks ... I can still vividly see her eyes when I turned her fragile body over in the shallow water, the solemn fear in her eyes still will stay with me forever and a day.'[458]

The most distressing incident John Glossop attended was a multiple fatality road crash to the south of Cooma on Wednesday 20 January 1988. There a car carrying a family of five (two parents and three children) and towing a caravan, was crushed by a semi-trailer. The semi had been overtaking the car and caravan on an open and straight stretch of alpine road when the wind gust created by the passing vehicles caused significant turbulence. The caravan and the truck clipped each other, forcing the car to pivot into and under the front of the semi. It was then violently flipped upside down and crushed as it was dragged for hundreds of metres, coming to rest on the shoulder of the road.

The protracted recovery operation was initially hampered by sparks emanating from the semi's engine, and the presence of leaking fuel dripping over the car. Police and ambulance officers had to reach and crawl under the truck to the car but found it very difficult to access inside, as it was little more than a metre in height in most places. Without equipment capable of lifting the semi off the ground, and only after being fully satisfied that the victims were deceased, police slowly drove the semi off the crushed car. The car was then righted using the winch of a tow truck. This made it less difficult (but not easy) for Glossop and others to recover the victims. The grisly

affair was made worse by a media helicopter hovering overhead, filming as the disembowelled remains of the youngest child (an infant) were being recovered from the roadway.

The remnants of the car alongside the damaged caravan. John Glossop is in the background near Cooma's Land Cruiser.

The distress caused by the incident was relived during the coroner's inquest, in which Glossop and other emergency workers gave evidence. The coroner ruled the collision to be an accident with no one person at fault. The sad events however were replayed again during a second coronial inquest, this one into the suicide of the truck driver who could no longer bear to live with the burden of what had occurred. To this day Glossop feels that the collision actually killed six people, and deeply scarred many more (including himself).

Shannon Smith is another rescue operator who has at times struggled with the consequences of what she has experienced. She often thinks about chance and the cruel ironies she encountered. When stationed at the Green Valley Police Rescue Unit, Smith attended a serious crash in which the driver was able to climb from the badly crumpled vehicle without injury. Just weeks later she

responded to another crash where the car was hardly damaged but the driver died in hospital the following day from an aneurism. There often can be little logic in the randomness of the destruction that rescue operators encounter.

Paul Smith is still haunted by an unsuccessful rescue operation on Wednesday 14 March 2001 at a waterfront-building site in Rozelle. There, on a barge, a worker was badly crushed in a pyramid-shaped pile of 25 metre long steel pipes. Trapped at his hips, the man remained conscious for well over an hour, during which time police and paramedics fought hard to get him out. Progress was extremely slow due to the precarious state of the pyramid and the high risk that other pipes could topple and crush the rescuers. Eventually enough pipes were wedged tight to allow oxy-acetylene equipment to be used to cut the actual pipes that had trapped the worker. Despite this:

> 'It was a sad thing because he knew he was going to die. While I was talking to him, trying to distract him, we tried everything we could to cut the pipes without others falling on us. But it took too long and his crush injuries were just too severe. It's the jobs like that one you hate.'[459]

Smith fondly remembers his time at RBDU but he is sombre about what it means to be a rescue operator:

> 'There is very little glamour in rescue work. It can be fun, challenging and tough – but the hardest part is the stuff you have to take home mentally.'[460]

For decades the use of black or gallows humour, and the consumption of alcohol, were the main ways in which many rescue operators dealt with the mental stresses of their duties. Consistent with the social conventions of the time, police would regularly descend on a local pub after work to drink (sometimes to excess) and tell each other 'war stories' of past jobs, gossip, or just to talk through the day's jobs as a way to give context to their otherwise horrific experiences. In the aftermath of really shocking cases the drinks would start soon after returning to base, if not sooner.[461] It was accepted that from time to time operators would be emotional, distraught or angry about what they experienced, but again in line with cultural expectations, such behaviour was discouraged either on duty or in front of colleagues.

Most rescue operators are able to self-manage both the ups and downs of their rescue careers, a few have worked for a decade or

more without any apparent adverse impact on their mental wellbeing. Many though, have struggled, with some developing serious psychological injuries. Symptoms of illness include increasing anxieties, failed relationships or divorces, increasing anger towards colleagues and loved ones, or self-medication through excessive drinking, alcoholism, or the use and abuse of licit (and even in some cases illicit) drugs. Others have left rescue and occasionally even the Force itself, finding themselves in a perplexing situation where they couldn't continue to undertake rescue work yet found non-rescue police duties to be dull or frustrating. In other cases police transferred to other areas of the Force for career development[462] only to later experience stress related symptoms, or didn't consciously recognise they had symptoms until after their rescue service had ended.

Historically, few rescue operators openly spoke about their feelings and mental anguish because they did not want to attract the social stigma of being labelled as weak. From the mid-1990s onwards though, a small but growing number began to be diagnosed with psychological illnesses including post-traumatic stress or other anxiety disorders. Reasons for these illnesses varied but included the often genuinely horrific nature of their duties, a lack of training or awareness about the risks, and a lack of support (perceived or otherwise) from the Force. In the 1990s and early 2000s in particular, a contributing factor to a sense of anxiety undoubtedly included the ongoing uncertainty about the future of police rescue itself.

Rescue, and the Force more generally, were initially poorly prepared both procedurally and culturally to deal with this troubling development. In the 1990s the Force did begin to employ psychologists and initiated a system of peer support officers; for years they were few in number and not always able to provide timely assistance. As society's understanding of psychological trauma evolved, the Force introduced new guidelines for psychological testing and debriefs after serious or traumatic incidents. However these were inconsistently applied, or sometimes applied in such a fashion as to discourage police from coming forward to seek help.[463] The frequency of get-togethers after work at the local pub also diminished significantly during the 1990s, reducing the informal opportunities to debrief. Reasons for this included changing societal standards on social drinking after work, increased policing of drink

driving laws, worsening traffic (increasing the travel times between home and work) and the introduction of 12-hour shifts. The latter in particular created an environment where most people are tired at the end of their shift and just want to go straight home.

Early departmental administrative procedures to manage claims of psychological injuries often treated claimants with deep suspicion. On more than one occasion a rescue operator who was identified as having psychological issues would be placed on leave for extended periods until they were medically discharged from the Force. Placing a person on leave at the very moment they are struggling with their condition is a vexed issue; employers have a duty of care to the employee and the workplace that they are not put into situations that cause further injury. At the same time the psychologically injured employee often wants to continue doing a job they feel passionate about but may not be able to do it either safely or without further trauma. The result can often be additional tension, stress and resentment. Complicating issues are privacy provisions that prohibit management from informing colleagues of the reasons for the employee's sudden non-appearance at work. The lack of physical manifestations of the illness can make it difficult for others to understand the true extent of the condition. In a number of cases in the 1990s and early 2000s, the first many knew that something was seriously wrong with a colleague what when they either read that person had been retired as medically unfit or had commenced litigation against the Force.

During this era a feeling of abandonment was common among those operators medically discharged for psychological distress. This contributed to the decision by several former rescue operators to litigate, either to seek fairer compensation for their injuries or to encourage enhancements to departmental procedures to handle future cases. Occasionally the substance of a lawsuit has become public through media reporting of a court case but most cases are settled out- of-court with non-disclosure agreements preventing further reporting of the matter.

An unknown but not insignificant number of serving or former rescue operators have at some stage experienced episodes of severe depression, a few to the point of having suicidal thoughts. Tragedy struck in 2004 when a highly respected and experienced RBDU member committed suicide while off-duty. The policeman had struggled for some time with his illness yet he chose to remain in the

thick of the action. His death devastated family and rocked colleagues, all of whom hadn't realised how ill he had become. The tragedy caused many to rethink their own careers and wellbeing.

In 1995 the mother of an ill rescue operator wrote a poem about her son's ongoing struggles. Lance Rice is one of the two operators decorated for their efforts in recovering the badly decomposed bodies of two boys from the base of the Pheasants Nest Bridge in January 1990. As horrific as that incident had been, Rice felt enraged at a murder scene in 1994 where he recovered the bodies of a father and two children from a car in bushland at Ingleburn – the father having stabbed the children to death before killing himself.[464] Even though he had been feeling unwell for some time, the Ingleburn incident triggered a series of events that culminated in his medical discharge in 1998. He subsequently sued the Force claiming it provided inadequate psychological evaluation and education. In the middle of legal proceedings, an out-of-court settlement was reached. Rice's illness had not gone unnoticed by close friends and family at the time, especially his mother Rhonda. Her heartfelt poem touches on the changes in her son's demeanour and society's expectations of men internalising their emotions:

> Gaunt face frozen in a nightmare
> Words that form – then fade away,
> Tearless gaze that aches its dryness –
> (someone said, "Real men don't cry").
> Throat constricted – almost choking –
> Sobs restrained – that tear the heart
> Weariness that knows no limits
> Agony that says "too late".
> Hand raised in a helpless gesture
> Hopelessness groaned in a sigh
> Tortured soul that grieves in silence –
> (Someone said "Real men don't cry").[465]

Society's attitudes towards and understanding of psychological illness have significantly evolved in recent years and this has been reflected within the Force.[466] Police are now better briefed than their predecessors on the risks, symptoms and causes of mental illness, and are encouraged to better monitor themselves and their colleagues. The Force's key message to police is that it is normal for their duties to impact upon them; it is normal to seek support and help when this

happens; and it is also normal for police to recover with that help. The message is part of a broader campaign to address the once strong culture that discouraged the reporting of mental health issues. Rescue operators and bomb technicians now undergo routine psychological assessment and counselling ('well checks') on a quarterly basis for RBDU members and at least yearly for members of the de-cents. Earlier this decade police commanders, managers and supervisors completed a five-stage leadership program that focussed on maintaining a safe and healthy workplace. While systemic enhancements have partly been brought about by litigation, and partly by legislation requiring employers to provide safer work places, the genuine desire of the Force's senior executive to better support police shouldn't be understated. It's acknowledged that the current support framework is not perfect, but it is definitely an improvement on previous iterations, and will continue to evolve.*

Dick Lamb leading training at a Sydney cliff in the mid-1980s. Lamb was arguably the most proficient and innovative rescue operator of his generation, and one of many who devoted himself to the squad and his family. In the 1970s and 1980s he developed and refined many rescue and support techniques that are still used today, and he was the first Police Rescue Squad member to arrive at the Granville rail disaster. During his distinguished career Lamb received numerous awards for bravery, He retired at the rank of Superintendent, unfortunately suffering from the effects of post-traumatic stress disorder. He died on 18 January 2016 – the 39th anniversary of Granville.

* The Force has many initiatives to support police and unsworn staff experiencing or exposed to psychological stress and illness.

Traditional approaches include peer support, counseling, well checks and a chaplaincy service. More recent initiatives include clinics that deliver preventative and rehabilitation programs, each underpinned by a ‘return to play’ philosophy (getting ill people better and back to work). Sessions are delivered by specialists such as sports physiotherapists, strength and conditioning coaches, psychologists and dieticians. Other initiatives include suicide prevention programs, nurse health checks, self-check tools, and programs that target lifestyle and general health issues, which help counter mental health concerns by building resilience and awareness. The Force also has a statewide database that captures details of incident attendance and interventions, which provides data to enable the continued development of appropriate support.

EPILOGUE POLICE RESCUE AND BOMB DISPOSAL TODAY

In a small and at times congested side-street in the inner southern Sydney suburb of Alexandria, stands a two-storey factory warehouse whose grey painted brick art-deco façade hints to an inter-war vintage. The quality of finish to the building's brick and metal cladding exterior, including a prominent but largely decorative square corner tower, is to a higher standard than most surrounding factories and warehouses that were built in the same era. This is in large part because the building has spent most (if not all) of its existence occupied by government agencies with funding to keep the building well maintained.

To the casual eye the building is unremarkable, its brick frontage is partially obscured behind large grilled metal gates with spikes and an adjoining concrete-rendered wall topped by barbed wire. To a keen observer however, there are some curious features worthy of note. The first is the lack of billboards or gaudy banners advertising the identity of the occupants – unusual for a building in a predominantly retail suburb. Also somewhat out of place is a deactivated sea mine on display near the building's front door.[467] A very small label is affixed to an intercom unit adjacent to the entry gate – it reads 'rescue'. Except for when a marked police vehicle enters or exits the property, there is nothing to suggest the building is the current base of the 38 women and men of the RBDU. This is a deliberate decision, consistent with the unit's historical preference for their base to be discrete and have a low-profile presence.[468]

The unit's move to Alexandria in September 2011 was part of a closing down of the Force's Zetland complex to make way for a massive urban renewal and gentrification project. With the Alexandria site little more than a kilometre from Zetland, RBDU remains located near the geographic centre of its State Rescue Board-assigned rescue area, close to major arterial roads, rail lines and Sydney's main airport.

Bill Fahey at the Mitchell Pass rescue on 12 May 1963.

Extensively refurbished prior to RBDU's move, the current building is undoubtedly the best-appointed facility the unit has occupied. Ample office and storage space has reduced equipment clutter and undercover protection at the rear of the building is afforded for all the unit's vehicles. Other features of the building include a modest gymnasium, underground cavities for confined space training, a climbing tower to practice vertical roping skills, and even a war-era bomb shelter now used primarily for bomb robot training and the storage of dusty historical records. On the walls of the base's wide corridors are numerous large photographic prints of historical incidents, including a vertical rescue of a young boy at the Mitchell Pass in the Blue Mountains during a stormy Sunday 12 May

1963. The boy and his family had been in a car when it rolled down a cliff. The image captures the stunned look on the youth's face; he is wrapped in a blanket, clinging to Constable First Class Bill Fahey's shoulders, whilst securely tied to the policeman's back with rope. For his part, Fahey has a whistle in his mouth and is holding onto a thick piece of manila rope that is being pulled by a hauling party. It's a classic photograph of a rescue operator in action in adverse conditions, exhausted and in dirty gear, yet making a difference.

A highlight for any visitor to the base is a small but impressively equipped museum containing an array of items significant to the history of police rescue and bomb disposal operations in NSW. Photographs, old equipment, uniforms and other mementos are proudly displayed. Items of particular interest include an old yellow wooden ladder stretcher, one of the first searchlights acquired by Harry Ware in the 1940s, Bill Fahey's black leather cap and the remains of the mincing machine that trapped young Tammie Thelan's arm in 1982. The museum's unofficial curator, Leading Senior Constable Marcus Backway, has two favourite items. The first is a painted display board from the late 1950s, used at public shows and fairs. On the board is a portrait of Harry Ware, beneath him is a scene of a cliff rescue underway with the Cliff Rescue Machine at the top and two small white dots (representing Ware and Tyson) at the bottom. Text on the board explains Ware's background and the role of the Rescue Squad. Backway's other favourite item is a beer coaster with a picture of the original Rescue 1, printed for the Rescue Squad's 25th anniversary celebrations. This particular coaster has the autographs of Ray Tyson, Bill Fahey, Doug Coasby, Joe Beecroft and Bruce Gane. The coaster was signed on the night of the anniversary ball and kept by its now unknown owner for decades, before being discovered by Backway at a police memorabilia market in 2016.

Not physically within the museum area of the building itself is another notable historical artefact – a glass-covered presentation box containing Harry Ware's medals, a small portrait photo and other photos of him on the Cliff Rescue Machine, uniform buttons and insignia, and the whistle he used before retiring. Ware's sons donated the medals and accoutrements to the Police Rescue Squad in 1979 and the display box is now mounted on the wall next to the unit's briefing room and supervisors' office. It serves as a constant reminder of the unit's heritage and the bravery of its founding leader.

Marcus Backway in the RBDU's museum in 2017.

While RBDU's base houses many important symbols of the past, it is also the repository of some of the most advanced rescue and potent bomb disposal equipment used by any civilian agency in Australia. Much of the equipment is carried in a fleet of Hino or Isuzu medium sized rescue trucks, Mercedes vans, Land Cruisers and trailers. Each is well marked with reflective decals that make the vehicles standout in traffic.[469] RBDU no longer operates the large purpose-built Internationals that fulfilled the Rescue 1 and Rescue 2 roles; they were retired from service in the early 2000s for reasons of utility and cost. Improvements in the quality and reliability of rescue equipment in the 1990s reduced the need for the big trucks to store spare sets of kit, in case of equipment failure. Further, a reduction in the physical size of new generations of hydraulic and associated equipment, and the withdrawal from service of the large reels of manila rope (requiring four people to carry each reel), led to significant amounts of vacant storage space on the Internationals. Disposing them became a logical step given that medium sized trucks were capable of carrying essential equipment, were more nimble in Sydney's worsening traffic conditions, and were cheaper to operate.

Rescues 1 and 2 were also no longer needed to carry sets of the

Cliff Rescue Machine as it too was formally retired from service in the early 2000s. In fact, the machine had ceased being used for anything other than training and display purposes by the mid-1990s. The fundamental design of the device remained sound and structurally robust[470] however, as a tool, it fell out of favour because of its heavy weight and the need for large numbers of personnel to operate it. Rescue operators instead had an increasing array of alternative options to recover victims from cliffs and heights such as the significantly lighter Larkin Frame, helicopters, and newer roping techniques that enabled operators to scale cliffs faster than the Cliff Rescue Machine in most (but not all) conditions. By the end of the 1990s training for the machine ceased: the closest that most operators came was when they walked passed one that had been set up for display by Neville Greatorex at the front of the Zetland base. After being formally withdrawn from police service, one of the two remaining sets was put into storage and then donated to Sydney's Powerhouse Museum in 2014. The second set was given to the VRA and has since been retired. In 2017 that set was returned to the police for display in RBDU's museum.

Away from Alexandria, the de-cents continue to occupy small amounts of space within their local police stations. Mostly the space is limited to a shed in which their vehicle is parked and equipment stored. The two exceptions remain Newcastle and Illawarra, the latter the contemporary name for a relocated Wollongong unit. In 2000 the unit moved from its Corrimal base to an otherwise disused police station in the suburb of Berkeley. In March 2011 the team relocated again, to a new regional police complex to the south of Wollongong at Oak Flats. The Newcastle unit also relocated in September 1999 from its large but rusting shed at New Lambton to a riverside building complex in Carrington that also housed Water Police and other government agencies. The spaces allocated to the units at both Oak Flats and Carrington are not as generous as previous bases however the office, storage and associated facilities within the current buildings are of a significantly higher standard.

Raquel Robichaux and Mark Bieder forcing entry into a crashed vehicle. The numbers of serious vehicle crashes in Australia requiring the attendance of rescue services is declining.

The workload and duties for police rescue operators is evolving markedly, influenced by trends such as the reducing number of serious road crashes. Reasons for the drop include safer cars, better roads and more stringent law enforcement measures including mobile speed cameras and random drug testing. In the Blue Mountains, Newcastle and the Illawarra, the police also now share primary rescue accreditation with firefighters,[471] further reducing the number of road rescues they attend. The frequency of industrial rescues and recovery incidents are also declining because of better training and awareness of safety procedures by workers, safer equipment, and increasingly strict workplace safety laws that can lead to criminal

prosecutions for neglect on the part of both employers and employees if there are serious injuries or death. These laws also apply to government instrumentalities such as the police and consequently the tactics of police rescue operators have evolved to the point that several historical feats recorded in this book would not be undertaken today, as they would be deemed too unsafe.[472]

This notwithstanding, police rescue teams are busier than ever. In 2010 police rescue operators attended 4558 calls (rescue, bomb and police support incidents), 5856 calls in 2014, and 5710 in 2015. The latter two figures exceed the peak annual figures reached in the pre-devolution era.[473] The increased popularity of extreme and outdoor sports has resulted in more instances of people becoming trapped in canyons, gorges and caves, or lost on bush tracks and along rivers. Detectives and other police are also more frequently calling upon rescue operators to use their equipment to help raid fortress-like buildings occupied by crime gangs, or to break into houses to check on the welfare of occupants. Rescue operators have also become quasi-pilots, operating small Remote Piloted Aircraft Systems (RPAS) to assist in rescue or other law enforcement operations. More commonly called drones by the public and media, RPAS is increasingly being used to scout for the location of missing or trapped people, or to photograph crime scenes from the air, providing birds-eye photos and video that are later used as evidence in court. The RPAS initiative had its genesis as the result of rescue operators seeking new tools to assist them in their work, and rescue units are now one of the few areas of the Force designated to operate the equipment.

Brett Taylor piloting a Remote Piloted Aircraft System (RPAS) in 2016. RPAS is proving invaluable for search and rescue and operational support work. Photo: NSW Police Force.

On Wednesday 25 July 2012 Chief Inspector Brenton Charlton commenced duties as RBDU Commander. Coming from a counterterrorism background, Charlton gained a first-hand appreciation of the diverse work of his team on his first morning at Alexandria. Almost immediately after the inspector entered the building, RBDU received a call to an IED discovered outside the front door of a pub at the western suburb of Milperra. Unknown to police at the time, the rudimentary yet powerful device built around a commercial explosive and placed in a paper bag, had fortunately failed to detonate because of a broken timer. Under the watchful gaze of senior officers including their new commander, RBDU operators Luke Bakey and Mark Reynolds used both the tEODor and Dragon Runner robots to remove the IED from its bag and then pull the device's components apart. Subsequent analysis of the circuitry identified the shop where they had been sold, which in turn led to a series of arrests by detectives.

Charlton has commanded RBDU during a period of significant reinvigoration. Considerable upgrading and modernisation of equipment has occurred for both RBDU and the de-cents. The process was commenced by Charlton's predecessor, Inspector Ian Rotsey, who convinced Force command to redress a sustained period of

diminished funding. A culture of innovation has been reinvigorated, examples of rescue operators rising to the challenge include the introduction of RPAS, implementing swift water rescue training for all operators, and the introduction of a new cliff rescue device – the Arizona Vortex. American-made, the Vortex is made from lightweight tubular metal pieces which can be configured as a tripod, bipod or monopod, each tied to improvised anchor points by synthetic ropes. First acquired by the Illawarra and Blue Mountains de-cents, the Vortex has proven extremely reliable and able to be used along uneven cliff tops. It was adopted as the primary vertical device for all police units in 2016 and the Larkin Frame was withdrawn from police service in early 2017.

Another significant change in practice for police rescue operators in recent times has been the 2014 introduction of the requirement to use two ropes per person, when undertaking vertical roping operations. The second rope is in case the primary line snaps, frays or breaks. Although there has not been any instance of a police rescue operator being seriously injured or killed while using a single line of synthetic rope, a rethink of the practice was undertaken in the context of the Force's enhanced safety obligations under evolving workplace health and safety laws.

An important innovation for NSW police conducting search and rescue operations is the in-house development of a digital mapping platform that accurately records and displays the tracts of land searched. Called PolSAR (for Police Search and Rescue), the program had its genesis in late 1993 amidst a massive search of the Belanglo State Forest to the north of Goulburn. In the forest, authorities discovered the decomposed remains of seven people along with evidence relating to their slaying by a serial killer. Late in the year, hundreds of police and emergency personnel conducted numerous searches over the course of five weeks, during which Phil Downes from Goulburn was responsible for keeping the multiple search teams on task. This involved plotting the tracts of land to be searched, recording those that had been searched, and analysing potential gaps and areas of future focus. This manual process was quite convoluted in a pre-Global Positioning System (GPS) era, and included having search team leaders use textas or highlighters to mark on maps the sections of the forest they believed they had searched. Downes enjoyed coordinating the search but subsequently felt embarrassed when giving evidence in court, as the maps looked to be covered in

child-like scribbles and marks. He resolved at the time to seek out a more professional way to capture data and accurately display it in court.

Phil Downes (left) and Scott Nicholls from Goulburn, testing Version 2 of the PolSAR program in 2017. Photo: NSW Police Force.

With improvements in computing technology the Force has enhanced its geospatial capabilities. In 2014 Downes (now the OIC of Goulburn's Police Rescue) obtained approval and funding support from Inspector Charlton to work with programmers to create PolSAR, including adapting a geographic information system that can easily integrate with the GPS units now issued to police and other emergency groups. PolSAR can be operated from laptop computers set up at forward command posts, receive updates of data from search teams, store and then reproduce the data with the precision and clarity required by courts. Version one of PolSAR was released in October 2014. On the basis of feedback from rescue operators, search coordinators and the courts in which the data maps have been presented, the program was updated and version two was released in November 2016. Future upgrades will follow.

An area of police support work that continues to occupy a substantial portion of rescue resources is responding to environmental protest activity and incidents of civil disobedience,

particularly in rural areas of the state where activists and local residents vehemently oppose commercial mining and drilling (fracking) operations. Over the course of several years, rescue operators have regularly been deployed for weeks at a time to support rural police in enforcing laws, dismantling traps and removing objects erected by protesters to stop mining and drilling from occurring. The persistence of this type of work has led to the creation of a new de-cent in May 2016 – the Western Region Police Rescue Unit. Consisting of general duties police from eight police stations in north-western NSW, some of which are several hundreds of kilometres apart, team members are called together as required.[474] The unit is not accredited by the State Rescue Board to conduct general land rescue operations, however its members are nonetheless fully qualified rescue operators:

> 'The volume and sensitive nature of the police support work in the state's west convinced us that a small cadre of appropriately trained police was essential to support local commanders. Deploying operators from Sydney or the other units can be expensive and take too long in urgent situations. The best way to provide a cadre that is trained and prepared to take on any type of support task is to have the police trained as rescue operators. This is because the skills for both types of work are interchangeable.'[479]

Displaying its flexibility, the team's first callout was to a body recovery operation in an underground opal mine near the remote town of Lightening Ridge. There, four members of the unit (assisted by two operators from Bathurst) recovered the body of a miner who was killed when industrial equipment fell on him.[480] On their way home the following day, the operators were detoured to assist in the aftermath of a light plane crash near Walgett.

Police and a firefighter inspecting the remnants of the crashed plane near Walgett.

The establishment of the Western Region de-cent is an undoubted highlight yet the last decade has not been without its challenges and controversies. In 2009 the Cooma unit was disestablished, local police management having determined its viability was unsustainable given the readjustment of staffing numbers in the area.[481] A regional operational support unit for the Far South Coast region, established in 2011 (on a model similar to Western Region) was also disestablished in 2015. Today, the Goulburn de-cent provides high priority operational support responses to Cooma and its surrounding region, the Illawarra de-cent provides similar support to the Far South Coast if needed. General duties police stationed in the snowfields continue to receive alpine search and rescue training.

Bathurst's Callum Patton (in grimy overalls) after he emerged from an extensive search of a disused mineshaft, tired but in good spirits. In 2014 the Bathurst team searched dozens of disused shafts to the north of the city in an unsuccessful attempt to locate the body of a young man believed to have been murdered in mid-2009. In 2015 the person charged with the murder was acquitted by a court – the justice hearing the case said his 'grave suspicions' about the accused's involvement was not enough for a conviction.

A significant challenge for Australian police today is the growing threat of Islamic terrorism. The shooting murder of police public servant Mr Curtis Cheng outside of NSW Police Headquarters in Parramatta on Friday 2 October 2015 (slain by a teenage would-be jihadist) has brought about a rethink by police of personal security measures. Enhanced weaponry and tactics are being introduced throughout the entire Force to better prepare police for dealing with terrorists and other violent offenders intent on using extreme violence. In addition to increased personal security measures, rescue operators and bomb technicians have a greater role in counter-terrorism operations than has previously been the case. A number of operators for instance were directly involved in the police response to a siege with terrorism links in the heart of Sydney.

About 9:44am on Monday 15 December 2014 an Iranian-born

refugee and Australian citizen produced a sawn-off shotgun from his backpack and took a number of staff and patrons hostage inside the Lindt Chocolate Café, on the ground floor of a 13-storey building near State Parliament. As police were arriving to surround the building the increasingly agitated gunman produced a black flag with the shahada on it[482] and claimed he had a bomb in his backpack. As uniformed and tactical police established a cordon around the café, RBDU personnel facilitated the evacuation of workers trapped on the building's upper floors using ladders and escorting them to safety along the tops of shop awnings. Other RBDU operators donned bomb suits and developed contingency plans with tactical police to render safe the backpack when the café was secured. Over 16 hours later, in the early morning of Tuesday 16 December, tactical police stormed the premises after the gunman murdered a hostage. The ensuing gunfight resulted in the gunman and another hostage being killed and a policeman wounded. As the surviving hostages were being evacuated, an RBDU operator entered the café to manually inspect the backpack. After several tense minutes the backpack was deemed to be inert – the gunman had lied about its contents.

Luke Bakey and Michael Hutchinson carrying an injured hostage to an ambulance, after tactical police stormed the Lindt Café. Photo: Fairfax.

It is difficult to envisage at least some of the 151 police rescue operators across the state not playing a role in a law enforcement

response to a future terrorist incident in NSW, whether it be evacuating bystanders, appraising and rendering safe suspicious devices, flying RPAS units to obtain aerial coverage of crime scenes, or supporting DVI teams.[483] That these police officers can apply their specialist skills to such situations is a testament to their commitment, and the unit's ethos that any challenge can be met. It's something, which Charlton is proud of:

> 'History is extremely important to us, and our rescue heritage is a significant part of who we are. But we are focussed and committed on having and maintaining the higher skill-sets required to support frontline police, be it at rescue scenes, bomb incidents, land searches, body recoveries, swift water rescues, protests, or general support work. That is our main goal. The Force needs to have a high-end capability that can respond to any threat, be it hostile or hazardous, or a mixture of both. As far as I am concerned, there is no delineation between bomb, rescue, and police support duties. Our people have to be good at all their skills, so they can provide a seamless and professional capability.'[484]

This ethos resonates as loudly today as it did when Harry Ware first agreed to work with police at The Gap, and when RBDU (and its previous incarnations) forged its reputation in places such as Darwin, Granville, Newcastle, Thredbo, Glenbrook, Waterfall, and the literally countless other locations throughout NSW. At these locations the police have confronted, tackled and overcome unspeakable horrors and tragedy, sometimes to their personal cost and often with considerable personal sacrifice.

> When he retired in 1976 Ray Tyson told reporters that: 'In police rescue, there is no such word as can't. It CAN be done.'[485]

This book has shown how Tyson's words were not hollow or self-serving. They are supported with demonstrable deeds undertaken time and time again by a unit that has steadfastly served the public and police of NSW for 75 years. The women and men who currently perform rescue, bomb disposal and associated duties may not think themselves as such, but they are custodians of an elite (but not elitist) legacy of public service that is unsurpassed in Australia. Through their efforts and deeds, may they and their successors continue to add to this tremendous legacy.

A tradesman at Pagewood, Sydney became trapped when a large piece of concrete fell into the trench. Mark Bieder (left) and Brad Robinson (inside the trench) work to free the young man. Robinson is preparing an air bag to raise the piece of concrete, while Bieder ensures a hydraulic ram keeps the top part of the concrete from falling further onto the tradesman.

APPENDIX A

POLICE RESCUE TIMELINE

1788	Sydney Cove is colonised by the British.
1789	The Night Watch (Sydney's first police) is established.
1862	The NSW Police Force is established.
1942	Mr Harry Ware is appointed to lead a team of NES volunteers to carry out body recoveries for the police from Sydney's eastern cliffs.
1942	Police take over body recovery duties using the NES machinery, with Harry Ware acting as advisor/trainer.
1944	Constable Ray Tyson qualifies as a cliff rescue operator.
1945	Harry Ware is employed by the police as a cliff rescue instructor.
1946	Harry Ware is appointed to the police as a special sergeant, to lead what is now known as the NSW Police Cliff Rescue Squad.
1953	Constable Bill Fahey joins the Cliff Rescue Squad.
1953	The name of the NSW Police Cliff Rescue Squad is changed to the NSW Police Rescue Squad.
1958	The Police Rescue Squad is formally established as a full-time unit.
1962	Special Sergeant Harry Ware retires and Sergeant Ray Tyson

	formally becomes the OIC of Cliff Rescue Squad.
1968	The Blue Mountains Police Search and Rescue Group is formed.
1969	The Volunteer Rescue Association is formed at a meeting held at the Police Rescue Squad's base at Redfern.
1971	The first Police Explosive Ordinance Disposal Course is conducted.
1974	Police Rescue Squad members deploy to Darwin, Northern Territory, in response to the damage caused by Cyclone Tracy.
1976	Sergeant Ray Tyson retires.
1976	The Police Rescue Squad's base is relocated from Redfern to Marrickville.
1977	The Granville Rail Disaster occurs.
1977	The decentralised units at Goulburn, Hornsby (later Pennant Hills), Liverpool (later Green Valley), Newcastle and Wollongong (later Illawarra), are established.
1978	The decentralised unit at Lismore is established.
1979	The decentralised unit at Bathurst is established.
1980	The decentralised units at Blacktown, Frenchs Forest and Sutherland (later Engadine) are established.
1984	The decentralised unit for the Snowy Mountains (later Cooma) is established.
1984	Constable Sally Verhage is the first female police officer to undertake and pass rescue operator training.

1984	Ken Holmes is appointed OIC of the Police Rescue Squad.
1985	Sergeant Bill Fahey retires.
1988	A review of NSW rescue policy is conducted by Major-General Ron Grey.
1989	The Newcastle Earthquake occurs.
1990	Police Rescue units are accredited to conduct rescue operations by the newly created State Rescue and Emergency Services Board.
1991	The NSW Police State Protection Group (SPG) is formed; it includes the Police Rescue Squad.
1992	The Police Rescue Squad at Marrickville relocates to Zetland.
1992	The decentralised units at Blacktown, Engadine, Frenchs Forest, Green Valley and Pennant Hills, are devolved.
1993	The five devolved units are reconstituted as Operational Support Units.
1994	The NSW Police Bomb Response Team is established.
1994	Inspector Ken Holmes retires. Garry Smith is promoted to Inspector and appointed as the Commander of the Police Rescue Squad.
1995	The Bomb Response Team is renamed the Bomb Disposal Section.
1997	The five Operational Support Units in Sydney are decommissioned.
1997	The Thredbo landslide occurs.
1997	The Bomb Disposal Section is transferred to the SPG.
1998	The Police Rescue Unit and the Bomb Disposal Section are merged

	to form the NSW Police Rescue and Bomb Disposal Unit (RBDU).
1999	The Glenbrook train crash occurs.
2000	The Sydney Olympics and Paralympics are held.
2003	The Waterfall train crash occurs.
2003	RBDU Commander, Inspector Garry Smith retires. His replacement is Inspector Stephen McGilchrist.
2008	McGilchrist transfers from RBDU. His replacement is Inspector Ian Rotsey.
2009	Cooma's Police Rescue is disestablished.
2011	The decentralised unit at the Far South Coast is established.
2011	RBDU relocates from Zetland to Alexandria.
2012	Inspector Rotsey transfers from RBDU. His replacement is Inspector Brenton Charlton.
2015	The Far South Coast unit is disestablished.
2016	A decentralised unit for the Force's Western Region is established.
2017	RBDU celebrates 75 years of rescue and operational support services.

APPENDIX B

RANKS OF THE NSW POLICE FORCE

Police ranks and insignia have changed since the NSW Police Force was first established in 1862. The following is the rank structure of the NSW Police Force in 2017, in order of descending seniority:

- Commissioner
- Deputy Commissioner
- Assistant Commissioner
- Chief Superintendent
- Superintendent
- Chief Inspector
- Inspector
- Senior Sergeant
- Incremental Sergeant
- Sergeant
- Leading Senior Constable
- Incremental Senior Constable
- Senior Constable
- Constable
- Probationary Constable

For a considerable portion of the period covered by this book the Force's ranks were slightly different to the above, particularly at the constable and sergeant levels. For example the rank of Senior Constable was introduced in 1945, with Leading Senior Constable introduced in 1995 and Incremental Senior Constable in 2002.

In 1995 the rank of Constable First Class was abolished (although its insignia of one chevron was later allocated to the rank of Constable). Earlier, in 1987, the ranks of Sergeant First Class, Sergeant Second Class and Sergeant Third Class were replaced with Senior Sergeant, Incremental Sergeant and Sergeant.

The title of Detective is not a rank but a designation, awarded to police who meet certain criteria in relation to their time and skills undertaking investigative duties.

APPENDIX C

RESCUE UNIFORMS

The uniforms and accoutrements worn by police rescue operators and bomb technicians have changed substantially in 75 years.

Overalls

As an NES instructor during World War II Harry Ware generally wore dark khaki shorts, a singlet and sweater (if it was cold) when working with police. After he was employed as a special sergeant in 1946, Ware's day-to-day attire was a shirt with tie, sports coat, police (dark blue) trousers and black boots. He would occasionally dress in a full police uniform (police shirt, tie, hat and tunic) at formal or ceremonial occasions.

Under Harry Ware's watchful directions, police undergo surf training wearing a mix of uniform pants and rugby tops.

At rescue calls, if there was time to change, the police wore faded khaki overalls (then called boilersuits) over their routine police uniforms. After business hours the overalls were worn over whatever the men happened to be wearing. Ware's most elegant attire one evening at a call was a tuxedo – he had been at a dinner ball when called away. Ware stayed in his tuxedo for warmth, but donned overalls to give the clothes some protection from the elements. At training sessions Ware's men tended to don rugby jumpers, police trousers and boots.[475] This preference arose from the fact that the early overalls easily stretched when they became wet, and Ware ensured his men always got saturated practicing body retrievals from the surf and rocks.

Post-war, dark blue overalls were acquired from the department's surplus war stocks. Although better in quality than their khaki overalls, the blue was difficult to see from a distance, especially at night. This was a significant handicap in a line of work where visual contact needed to be maintained in dangerous conditions. By the early 1950s the team adopted white overalls, initially for night operations but soon adopted for daytime wear as well. For a decade or so the overalls were unmarked but by 1962 the words 'Police Rescue Squad' were sewn across the back in large lettering and in smaller lettering across the front left breast. Sets of unmarked khaki and blue overalls continued to be issued to squad members until the mid-1970s, primarily to be worn in situations where it was expected the wearer would get quite dirty or where rescue squad members were required to assist in situations where it was considered not 'politic' to wear white overalls.[476] Scenarios included raids where the squad was called upon to use their equipment to force entries into illicit premises such as gambling houses, and to have worn marked uniforms while discretely approaching the premises would have given ample warning to lookouts.

White was a very popular colour among the squad but the cut of the overalls had limitations. They did not have multiple pockets in which maps and other small items could be stored, there were no security pockets for the safekeeping of wallets and monies, and the overalls did not have tabs at the bottom of the legs that could be secured to prevent debris, bush and other items from scratching lower legs. Because of the small number of overalls required for the squad, the then manufacturer refused to alter their design. In 1969 Ray Tyson found a South Australian company that provided a very

practical khaki coloured overall to army tank crews and to members of the Force's Emergency Squad.[477] Fortunately the company readily agreed to produce a small number of white overalls and the first sets were delivered in early 1970.

A public relations photo taken by Gary Raymond in the mid-to-late 1970s, illustrating the types of domestic rescue calls police were often called to. Dick Lamb is holding onto his daughter Jennifer while Brian O'Rourke simulates prying apart the iron rails using a set of Enerpac spreaders. Operating the pump is Norm Place, who was on probation in the squad at the time (hence him wearing blue overalls).

In the mid-to-late 1970s deep blue versions of the overalls were issued to the new rescue operators who served a three-month probationary period at Marrickville. In 1978 the Force's hierarchy decided that the white overalls were to be replaced with light blue versions (with white writing). This emanated from a line of argument arising from the police response to the Granville rail disaster, where several rescue agencies wore white overalls and it was difficult at times for police commanders (but not the rescue operators) to work out who was from which agency.

The decision to phase out white was controversial, resisted by many and even ignored by some (particularly some of the de-cents

outside of the Sydney Metropolitan Area). Almost to a man, rescue operators regarded the cheaper fabric blue overalls as uncomfortable and less safe (due to their colour), particularly in the bush or at night in urban areas when conducting rescues on roadways near passing traffic. Within 18 months of the directive being issued, and in the aftermath of the retirement of a very senior officer who had sponsored the initiative, the flirtation with the blue overalls for rescue work was suddenly abandoned and white again became de rigueur within the police rescue fraternity.

White overalls continue to be worn by police rescue operators to this day. The contemporary design, introduced in 2007, contains refinements of the previous styles along with some additional features. Reflective grey stripes including the blue Sillitoe Tartan patterns[478] are now sewn into various locations on the overalls. Rank insignia are now displayed on epaulettes instead of being sewn on the upper sleeves of the overalls, and the words "Police Rescue" have replaced "Police Rescue Squad" on the front and back. Dark blue overalls are issued to operators who are qualified to undertake bomb disposal work however many choose to remain in their white overalls.

The Force's rigid policy on uniforms until the mid-1970s meant until then rescue operators were required to wear their full general duties uniform under their overalls, no matter what the weather. This uniform consisted of woollen pants, long sleeve blue shirt and tie. The general uniform for police was revamped in 1972 with a (slightly) more pragmatic approach to standards of dress (ie: no ties to be worn in the hot summer months). Rescue operators however were still expected to wear at least their standard blue police shirt under their overalls, and also their general police trousers if there was a possibility that they may have to change out of their overalls during a shift. By the late 1980s plain tee shirts and shorts were commonly worn under overalls. Part-time rescue operators at the decents were (and are) invariably dressed in their general policing uniforms when called-out and don their overalls either on the way to or when they arrive at an incident.

Jackets and Boots

The types of jackets and raincoats worn by the squad have evolved. In the early years operators were generally limited to wearing the heavy black rubber raincoats that were on general issue to police.

Blue and green (some ex-military stock) jackets have also been periodically trialled from time-to-time. The squad took to wearing bright yellow coloured rain jackets almost immediately they were introduced for sale into Australia in the early 1970s. For day-to-day wear in cold weather the squad acquired blue padded synthetic material jackets (with white chequered stripes on the sleeves) in the late 1970s. These were phased out from 1990 onwards for black leather duty jackets, which in turn were replaced by polar-fleece jackets for day-to-day wear from 2000 (although the leather jackets have been retained for ceremonial occasions).

Boots are the item of uniform that have undergone the most change over 75 years, as technology, styles and personal preferences have constantly evolved. Cliff work in particular requires high degrees of agility and nimbleness on the part of rescue operators, qualities not enhanced in the 1940s and 1950s with a generally appalling quality of standard boots, with rigid soles that were slippery in the wet. Steel capped safety boots were also impractical for both cliff and bush work. For a time the squad were able to source (at departmental expense) a New Zealand-made product known as Sherpa Soles, which were used to replace the soles of standard police boots. In more recent decades, with technology constantly evolving to produce better quality footwear, the Force has allowed the squad to experiment with different boot types, provided they are professional in appearance. To this day footwear is the one uniform item that is most influenced by personal preference.

Headdress

The wearing of police caps while outdoors has been an organisational requirement for police in NSW since the 19th Century. This created a problem for rescue operators at the cliffs as the standard police cap, arguably the most striking part of the uniform, often got in the way of the wearer or was easily blown off and into the ocean below. By the end of the 1940s squad members risked the opprobrium of senior officers by leaving their caps in their vehicles during rescue operations, although they ensured as much as possible they put the caps on if the media was taking their photographs. During night operations it was also common for Ware to wear a beret instead of a cap for warmth.

In the early 1960s a compromise was found when the squad began to wear the same style of black leather caps as then worn by

police motorcyclists. These caps were smart in appearance and gave the wearer a degree of head protection against bumps and the sun. Miner's helmets were trialled by the squad as an alternative to hats for cliff work in the 1950s and white coloured horse-riding helmets were trialled in the 1960s. The peaks on both helmets created a blind spot for operators when they were close to a cliff and had to look upwards. As a consequence the helmets were mostly eschewed in favour of the more stylish leather caps (which changed in colour to dark blue with the Sillitoe Tartan chequered band in 1972). An experiment with a locally designed vinyl mountaineer hat in the 1970s was promptly abandoned after a number blew off the heads of rescue operators on the Sydney Harbour Bridge.

Also in the 1970s the squad acquired hard plastic light blue coloured safety helmets primarily as an option at road and industrial rescues. Like the earlier helmet styles, these were not fully suitable for cliff work and could not be worn on the Sydney Harbour Bridge (hard helmets were prohibited by regulation for reasons of safety to passers-by below). Mountaineering helmets of various colours and styles were trialled and (optionally) used for vertical roping, and were preferred for cave operations. It would not be until the late 1990s that blue coloured mountaineering helmets (without peaks) became compulsory for all emergency responses, with cloth baseball style caps replacing the leather caps for day-to-day wear (noting differing styles of baseball caps had been trialled as early as the 1970s).

Shoulder Patches and Pins

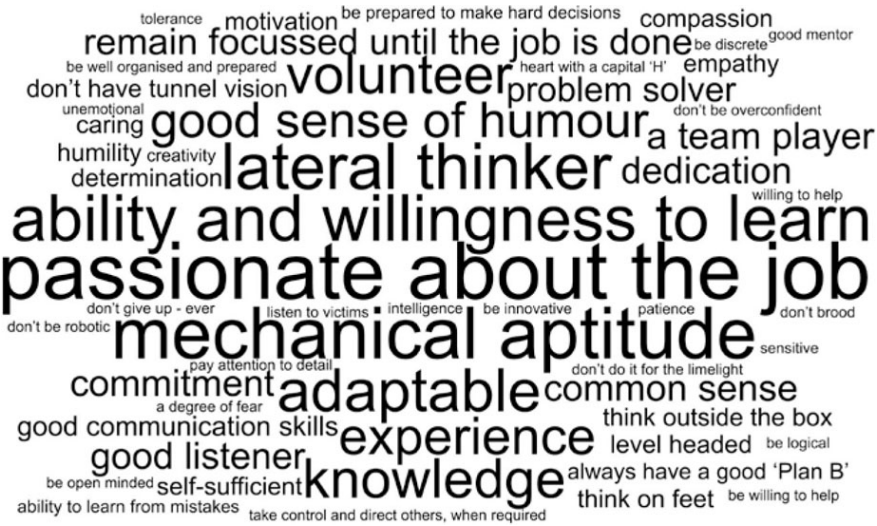
With its 1972 reform to the style of the general policing uniform and the introduction of a plain hexagon shaped shoulder patch with 'NSW Police' on it for both sleeves of shirts and tunics, Force command determined that some specialist units like the Rescue Squad could design and wear bespoke patches. Rescue's patch (designed by Bill Fahey) elaborately depicted a clenched fist in chain mail armour, with wings, surrounded by a laurel wreath with 'NSW Police' and 'Rescue Squad', all under the Queen's Crown. The design had been a compromise. The first idea was to acknowledge Ware and his most common nickname, a spider that inhabits the cliffs. A slight technical hitch presented itself however in that there was no such arachnid unique to Sydney.

Influenced to an extent by other designs, the clenched fist patch represented the values of strength, speed and efficiency.[486] It was worn proudly until the Force phased it out in 1977, immediately prior to the commissioning of the first de-cents. The first tranche of part-time rescue operators were issued overalls with the hexagon patches but by the early 1980s all rescue operators were issued with a variation of the Force's new shoulder patch that had the Nemesis eagle[487] at its centre. The variation was the words 'Rescue Squad' sewn into the circle surrounding the eagle instead of 'New South Wales Police Force'. These patches too were phased out mid-1980s and replaced by the standard patch (which is still worn today).

In the late 1980s Tony Malone made representations to senior command to allow rescue operators to wear a small pin on the chest of their general duties shirts. In the same way that Water Police were allowed to wear small anchor symbols, and PolAir members wore silver wings, the Rescue pin would denote a specialist qualification. It was an opportunity to further build a sense of camaraderie and pride, particularly among members of the de-cents who wore their general uniforms for the majority of their shifts. Approval was given and the design chosen by Malone was the Nemesis logo with the word 'Rescue' underneath it. The pin was so popular that rescue operators preferred to purchase the first batch immediately instead of waiting for months for the Force to tender, purchase and then issue them.

APPENDIX D

WHAT MAKES A GOOD RESCUE OPERATOR?



Each experienced police officer interviewed for this book was asked what, in their opinion and experience, made a good rescue operator and bomb technician. Manuals and contemporary reports were also consulted. The more often a word or phrase was used, the larger it appears in the above word cloud.

APPENDIX E

KEY DEFINITIONS

When the then NSW Government determined to act on Major-General Grey's report and legislate for a rescue coordination framework, the need arose to define key phrases in law, and then in supporting policy. The legislative definition of *rescue* settled upon by parliament was initially placed in Section 6 of the *State Emergency and Rescue Management Act 1989:*

> 'The safe removal of persons or animals from actual or threatened danger of physical harm.'

The definition was subsequently moved to Section 3 of the Act, and amended slightly with the word 'domestic' inserted before the word 'animals'.

> Section 52 of the Act currently defines a 'rescue unit' as:
> 'A unit (comprising a group of persons) which carries out rescue operations for the protection of the public or a section of the public.'

This definition is also a slight amendment from the original definition, which did not have the words 'a group of' in it.

In support of the Act, the State Rescue and Emergency Services Board's inaugural State Rescue Policy issued on 22 July 1991 defined (in Section 2.01) a 'primary rescue unit' as:

> 'A unit with a properly equipped vehicle and trained rescue personnel which has the function of responding with trained personnel to rescue incidents on a 24 hour, 7 day per week basis and has been accredited to do so. It carries sufficient approved equipment to carry out all rescue tasks within its dependency. These units are accredited to respond first to rescue situations [sic]. In the Sydney Metropolitan Area, all accredited rescue units are designated Primary Rescue Units. In all other areas, Primary and Secondary Units have been accredited.'

The policy's Section 2.02 defined 'secondary rescue units' as:

> ‘A unit which has the capability, sufficient equipment and trained personnel to respond to rescue incidents as a secondary function to its primary role and has been accredited to do so [sic].’

Section 2.15 of the document then defined ‘rescue crews’ as:

> ‘The minimum crew for a rescue vehicle is two qualified operators at the scene of a rescue incident.’

Since its release in 1991 the policy, which must be adhered to by all relevant rescue units in NSW, has periodically been refined, revamped and/or expanded, to reflect emerging issues and developments. Today’s document (3rd Edition, Version 3.5) is more extensive than the original, and addresses issues not initially identified or thought necessary in the early 1990s. New topics include risk management, the taking of photos at rescue scenes and the use of helicopters in rescues. The issue of maritime rescue accreditations is also now more fully canvassed. Today’s policy also gives amended definitions to the following terms.

Section 2.01 defines ‘primary rescue units’ as:

> ‘A unit with trained crew, rescue vehicle and rescue equipment which has been accredited to respond first to rescue situations, on a 24 hour, seven day a week basis.’

Section 2.01 defines ‘secondary rescue units’ as:

> ‘A unit which has the capability to respond to rescue situations when the primary unit is already committed to a rescue incident, is otherwise unavailable to attend or where a primary rescue units requests assistance. These units are accredited for secondary responses, on a 24 hour, seven day a week basis.’

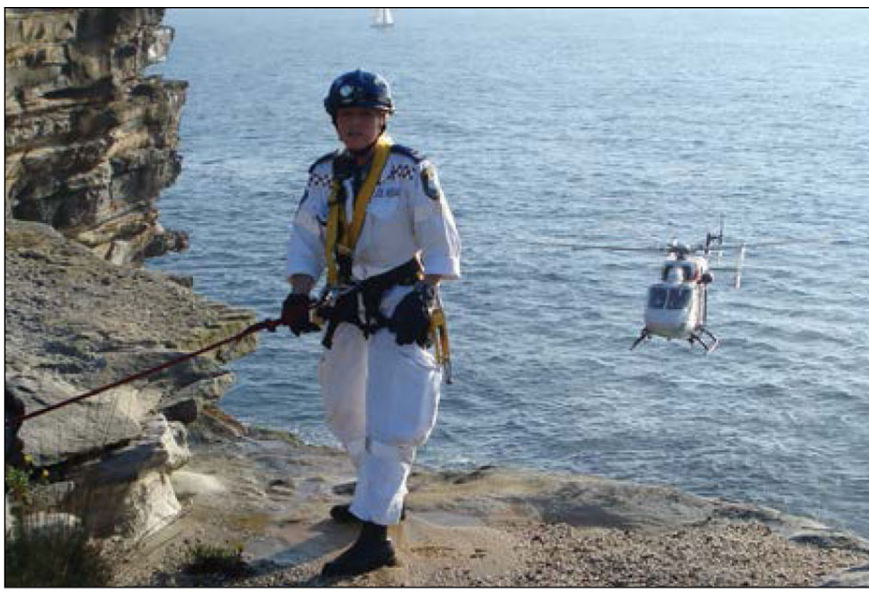
Section 2.03 defines ‘rescue crews’ as

> ‘The minimum crew required to respond to a rescue incident is two qualified and current operators. Trainees may attend to conduct on the job training, in addition to the two qualified rescue operators, but must be supervised by a qualified and currently competent rescue operator not actively involved in the rescue.’

A copy of the policy is maintained on the State Rescue Board’s website.

APPENDIX F

A BRIEF OVERVIEW OF HELICOPTER RESCUE IN NSW



Jenny Lee Howell preparing to descent to the bottom of The Gap. A PolAir helicopter hovers in the background.

Helicopters have become an important and much relied upon resource in many rescue operations, either as a tool to assist in locating and/or rescuing a victim, and/or to enable the rapid transport of the victim to a hospital. The NSW Police Cliff Rescue Squad first conducted a joint operation with a helicopter during a search and rescue operation to Sydney's northwest, near Windsor. The exact date of the operation has become lost in time but it was in the early 1950s. Between then and 1970s the military were the main provider of helicopters, although limiting factors that restricted the numbers of callouts included the at-times considerable distances between an incident and a helicopter base, aircrew availability (particularly after hours) and an increasingly bureaucratic process for

military units to assist civilian authorities.

The first civilian rescue helicopter service in NSW started on a part-time basis in Sydney in 1973. Through fundraising and obtaining corporate sponsorship, the Surf Life Saving Association (SLSA) commissioned a helicopter to patrol Sydney's beach areas on weekends and public holidays during the surf season. The success of the service was instant and coverage was soon extended to all weekends and public holidays, and later to 24-hours-a-day. In addition to expanding their hours of operation, SLSA acquired more helicopters for its Sydney operations, and established additional operations in Newcastle, Wollongong and Lismore. In each location the crews developed a close working relationship with police rescue operators.

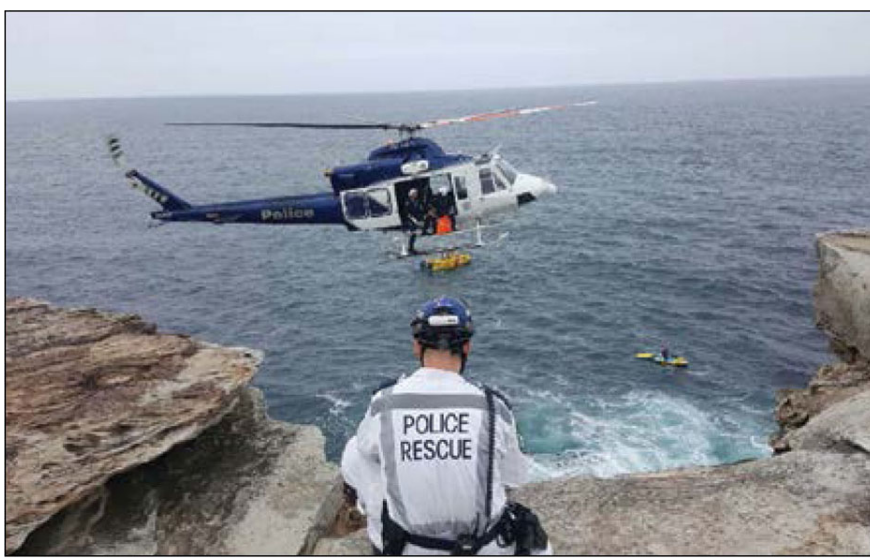
In 1986 a not-for-profit company and registered charity was formed to operate a helicopter-borne medical retrieval service that could also conduct rescues. From its first mission, CareFlight operated with an on-board doctor to give an extra degree of medical care to patients. Initially restricted to daylight hours only, CareFlight obtained a 24-hour response capability in 1987. In 1989 CareFlight was also the first operator to embark a paramedic from the Special Casualty Access Team on its rescue flights.

In 1989 the Ambulance Service of NSW began to provide funding to both SLSA and CareFlight to conduct helicopter emergency medical services. To further streamline operations and achieve financial efficiencies, in 2006 the Ambulance Service conducted a state wide tender for helicopter emergency medical services. This process resulted in a reduction of government subsidised aircraft operators.

The one government organisation with a long-standing helicopter rescue capability is the NSW Police Force. In 1978 the government endorsed a proposal for the police to obtain helicopters primarily to assist in countering the increasing rates of armed robbery and other serious crime. In May 1979 the Force took ownership of a Bell 206B Jet Ranger III, a second was delivered in December 1979 and a third in December 1980. Each was equipped with a range of items including a powerful searchlight and a winch to affect the raising and lowering of people. Over subsequent years the number of helicopters operated by the Police Air Wing (PolAir) at any one time was increased to five, including one jointly operated by the police and the NSW Fire Brigades for counterterrorism, HAZMAT and incident

response duties.

Today officially titled the Aviation Support Branch, PolAir remains focussed on reducing crime and supporting police operations, including conducting rescues and supporting ground search and rescue operations. PolAir also works closely with police rescue operators through joint training and the transportation of personnel and equipment to callouts. An example occurred after lunch on Sunday 4 October 2015 when PolAir flew Senior Constables Wayne Bolitho and Mel Brown, and their equipment, to the base of the Nepean Gorge, near Wilton to Sydney's southwest. There, they recovered the body of a woman who had committed suicide. She had earlier driven to a nearby farm and sought directions to one of the gorge's cliffs. When the property owner pointed out the direction, the woman drove her car straight over the side – to the stunned amazement of campers who watched the whole thing. Because of the helicopter, the time to recover the victim was much shorter than had they been required to rappel down the cliff or use the steep walking tracks.



RBDU and PolAir personnel cooperating at a body recovery mission along one of Sydney's treacherous cliffs, in early 2017.

The use of helicopters for rescues in rugged bush locations in NSW became commonplace by the late 1990s but this is less so today, in large part because of an operation that went tragically wrong on

Christmas Eve 2011. In a ravine between Goulburn and Wollongong, a paramedic died while trying to winch an injured patient from near the base of a waterfall. Police rescue operators from Goulburn and the Illawarra assisted ambulance officers in retrieving the body of the deceased paramedic, and rescuing the patient who survived the fall. A coroner later found that a number of mistakes and errors were made in the original rescue effort, each compounding the other, and culminated in the death. The lessons learned have led to changes to the tactics and risk tolerances used by helicopter rescue crews, and a rise in the percentage of calls where ground parties must carry the victims from the location to either a waiting ambulance, or to open ground where the helicopter can safely land.

A 1980s public relations photo for the Police Rescue Squad and PolAIR.

APPENDIX G

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Sinclair, R, *Encourage them to cry,* (video recording), Independent

Productions, Sydney, NSW, 1983
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Endnotes

1 NSW Police Rescue Squad, *50 years of service to the community,* NSW Police Force, 1992, p.11.
2 Petrol rationing in Australia ceased in 1948.
3 Royal Marine officers insisted that their main role was to protect the colony from outside attack and guard the convicts in gaol: Bruce Swanton, *The police of Sydney, 1788 – 1862,* Australian Institute of Criminology and New South Wales Police Historical Society, Phillip, A.C.T., 1984, p.1.
4 In fact, quite a few marines were involved in criminal activities themselves.
5 Frank Bladen (editor), *Historical records of New South Wales,* Vol 1, Pt 2, 1892, p.293.
6 Swanton, op. cit., p.12.
7 NSW Police Department, *Annual report for the year 1913,* Sydney, p.4; and *Police annual report for 1914,* p.4.
8 These devices pumped carbon dioxide into a victim's mouth. The use of carbon dioxide for resuscitation was a fashionable practice at the time, but later discredited.
9 *Police annual report for 1934,* p.5.
10 *Police annual report for 1935,* p.25.
11 Police radio communications at the time were not voice transmissions but a variation on Morse code.
12 *Police annual report for 1903,* p.6: *Police annual report for 1910,* p.22: *Police annual report for 1919,* p.17.
13 *Police annual report for 1921,* p.18.
14 The ambulance officers' union raised this concern with the Police Association of NSW: Police Association of New South Wales, *New South Wales police news,* August 1947, p.7.
15 For many decades it was a crime to attempt suicide. Further, many murders have been committed along Sydney's cliffs.
16 Kevin Waller, *Suddenly dead,* Ironbark, 1994, p.vi.
17 'Fall from Gap', *The Scone Advocate,* Tuesday 24 November 1931, p.2.
18 'Policeman risked life', *The Daily Examiner,* Thursday 16 March 1933, p.5.
19 'Rescue at the Gap', *The Sydney Morning Herald,* Wednesday 9

November 1938, p.18.
20 ‘N.S.W. Police Heroism in 1939’, *New South Wales police news*, 1 August 1940, p.49.
21 Police Rescue Squad, *50 years of service,* p.5.
22 At the time the Sydney Harbour Bridge was reportedly the scene of more suicides than the cliffs. Authorities were better able to recover the victims from under the bridge than they were along the cliffs.
23 Ray Tyson, Interview with the author, 26 January 1994.
24 Manila rope is made from a fibre from the leaves of the abacá plant, a native of the Philippines. Manila rope has been widely used for centuries; it is durable and reliable provided it is well maintained.
25 Ray Tyson, Interview with the author, 26 January 1994.
26 *Police annual report for 1939,* p.2.
27 Some of the extra duties police were required to undertake included guarding important installations, filling sandbags, learning how to demolish bridges and buildings (in case of invasion), assisting in warden duties and surveilling potential subversive agents. Police were exempt from conscription but so many voluntarily resigned to join the military that a prohibition was placed on resignations for military service.
28 The largest of the several ambulance services then in operation in NSW.
29 The NSW Fire Brigades (now called Fire & Rescue NSW) is the state’s urban fire service.
30 Such as placing people into stretchers and lowering them using ropes and ladders from bomb-damaged buildings.
31 Bill Fahey, Interview with the author, 30 May 1994.
32 Fred Lord, ‘Death gamblers of the cliffs’, *The wide world: the true adventure magazine for men,* Australia & New Zealand, October 1960, p.121.
33 A snatch block is a pulley device used to assist in lifting heavy objects. The blocks are designed to deflect or change the direction of a loaded rope in such a manner as to dramatically increase the lifting capacity of the rope.
34 ‘Daring cliff rescues are their work’, *Australian Woman's Weekly,* op. cit., p.20.
35 It would appear that some of the rescue and recovery missions undertaken during this period were claimed as NES

operations.
36 C.McNeil, 'Cliff Rescue Jobs', *The Bulletin*, Wednesday 9 November 1955, p.25.
37 ibid.
38 Ray Tyson, Interview with the author, 26 January 1994.
39 In subsequent decades medical research established that the firmness of the ladder stretcher made it an ideal platform on which to rest people with suspected spinal injuries.
40 Ware continued his NES duties until he joined the police in 1946, and trained more than one NES team in the use of the Cliff Rescue Machine.
41 The establishment of the team was not widely advertised at the time. Contemporary NES documents indicate that the police had taken over cliff work by 1943, and it was certainly the recollection of Ray Tyson and Bill Fahey (based on their extensive conversations with Harry Ware) that the police started the role in 1942.
42 *Police annual report for 1945,* p.3.
43 Ibid.
44 C.McNeil, op. cit., p.25.
45 *Police annual report for 1946,* p.11.
46 By early 1944 elements of the NES, including Harry Ware, lobbied parliamentarians and senior officials to keep the organisation going after war's end. Numerous rescue demonstrations were conducted to display the skills and capabilities of NES teams. This included using the Cliff Rescue Machine. These efforts proved to be in vain. Individual NES units throughout the state began disbanding in 1945 and the organisation was formally wound up in late 1946.
47 At law, Ware was appointed as a special constable with the rank of sergeant.
48 At the time police stations in Sydney and the Central Coast were grouped into 'Divisions', with rural police stations grouped into 'Districts'.
49 *Police annual report for 1947,* p.12.
50 *Australian Woman's Weekly,* op. cit., p.20.
51 Ray Tyson, Letter to the author, 5 May 1995.
52 The terms 'foreign orders' or 'foreigners' are slang for errands performed while on duty but for personal reasons, ie: paying bills or buying items.

53 ‘Full moon suicides’, *The Toodyay Herald*, Thursday 3 November 1949, p.6.
54 It should be highlighted that many of today’s experienced rescue operators are amazed by this feat: Ray Tyson, Interview with the author, 26 January 1994: ‘Death of Sergeant Harry Ware’, *Sydney Morning Herald,* Saturday 25 April 1970, p.14.
55 Comments from Coroner Medlicott as recorded on Harry Ware’s NSW Police Force service records.
56 Ray Tyson, Interview with the author, 26 January 1994.
57 ‘Police lower judge over cliff’, *The Sydney Morning Herald,* Tuesday 5 April 1949, p.1.
58 O’Brien, *op. cit.,* p.226.
59 ‘Police spend days at cliff: “body” was at work’, *The Sydney Morning Herald,* Tuesday 3 December 1946, p.1.
60 ‘Vain search for girl near wrecked yacht’, *The Sydney Morning Herald*, Wednesday 12 July 1950, p.1.
61 ‘200ft fall kills woman’, *The Sydney Morning Herald,* Sunday 25th June 1950, p.5.
62 Fred Lord, op. cit., p.127.
63 Fred Lord, op. cit., p.128.
64 Fred Lord, op. cit., p.126.
65 Bill Fahey, Interview with the author, 18 December 1994.
66 Like an airline captain inspecting her/his plane prior to takeoff, the rescue operator who was to descend the cliff was the last one to inspect the Cliff Rescue Machine, to ensure the posts, ropes and tie points were correctly fastened.
67 *Danger is my business*, Television show, Crane Filmed Production, California National Presentation, 1958.
68 The kits were periodically updated. By the 1970s they included water knapsacks that were worn on the back with a hand-held manual pump used to shoot water onto a fire. The Rescue Squad continued to maintain these kits until they were phased out in 1980.
69 Ray Tyson, Interview with the author, 26 January 1994.
70 ‘Tragedy and heroism as bushfires ravage home, property yesterday’, *The Sydney Morning Herald,* Saturday 26 January 1952, p.1.
71 VKG was the call-sign allocated to the Force by government authorities.
72 Ray Tyson, Interview with the author, 26 January 1994.

73 *Police annual report for 1956,* p.16.
74 On more than one occasion the Rescue Squad would place an order for meals with the kitchen of the Railways Department, who would make the meals and then send them by train to the nearest railway station to the incident, to be collected by police.
75 Minute dated 3 March 1969 from Sergeant Ray Tyson to the OIC of the Police Training Centre.
76 The trailers were first loaned by the military in early 1971 and were eventually transferred to the police for a nominal payment. They were used until they began to fall apart.
77 Police Rescue Squad, *50 years of service,* 1992, p.8.
78 ibid, p.9.
79 ibid, p.7.
80 *The Toodyay Herald,* op. cit., p.6.
81 ibid.
82 Ray Tyson, Interview with the author, 26 January 1994.
83 The exact date of the name change, like the exact date the squad commenced in 1942, has become lost in time. The best reference point is the Force's annual reports. In 1952 the team was called the Police Cliff Rescue Squad whereas in the 1953 report it was referred to as the Police Rescue Squad, and kept that name in subsequent annual reports.
84 Victoria Police's Search and Rescue Squad was formed in 1957 to specialise in bush searches but subsequently expanded to include diving operations. The South Australia Police formed a Cliff Rescue Squad in 1957. The squad's role was subsequently absorbed into the Special Tactics and Rescue Group in the late 1970s. The Tasmania Police formed a Police Emergency and Rescue Squad in 1959, which initially tackled a mix of bush search and rescue, cliff rescue and road rescue operations. The ACT Police formed a Search and Rescue Squad in 1964 that subsequently expanded to undertake general land rescue operations. While each of these teams subsequently evolved and focused on different tasks, the original decision to establish them was influenced by the success of the NSW Police Rescue Squad.
85 Bill Fahey, Interview with the author, 30 May 1994.
86 Until 1976 there were multiple ambulance services operating in NSW, each heavily reliant upon a mix of health insurance fees, government subsidies and community fund raising, to operate.
87 NSW Police Department, *Submission by the New South Wales*

Police Department for presentation to the Committee of Inquiry into New South Wales Fire Brigades, 1977, p.40.
88 Police were unsuccessful in locating and arresting the slasher that night, however he was later caught in April 1959 and subsequently sentenced to a lengthy period of imprisonment. The 29-year-old was an office clerk who told police he enjoyed the thrill of being chased.
89 Graeme Thorne's murderer was eventually caught, imprisoned and died in gaol.
90 Ray Tyson, Interview with the author, 26 January 1994.
91 Bill Fahey, Interview with the author, 18 December 1994.
92 The company had to name the assortment of items for billing purposes, so 'RK10' (for Rescue Kit 10 Tonnes) was printed on the box.
93 Police Rescue Squad, *50 years of service,* p.12.
94 Bill Fahey, Interview with the author, 18 December 1994.
95 Bill Fahey, Interview with the author, 30 May 1994.
96 *Police annual report for 1963,* p.24.
97 *Police annual report for 1963,* p.23.
98 Commissioner Delaney spoke in support of the event on radio, knowing that the money would purchase a vehicle and equipment for the St. George District Ambulance Service.
99 When the eight ambulance services in Sydney merged into one on 1 March 1962 a decision was taken for the Q-Van to use only the ambulance radio network: Clement Deeth, *The Ambulance Service of Sydney 1894 – 1976,* New South Wales Ambulance Service, 1979, p.255.
100 The vehicle was transferred to the St. Ives Ambulance Station later in the decade.
101 'Sgt Ware goes home', *The Sydney Morning Herald,* 19 March 1961, p.5.
102 This was a period of time before the phrase 'rock spider' took on a sinister meaning indicating a certain class of criminal.
103 Gordon Benjamin, 'They call him the rock spider', *The Brisbane Telegraph*, Thursday 12 February 1953, p.5.
104 Bill Fahey, Interview with the author, 30 May 1994.
105 ibid.
106 ibid.
107 The day was at the very peak of the Cuban missile crisis; the world was transfixed on the real potential that nuclear war could

start any minute.
108 ‘Worker saved after sandheap ordeal’, *The Sydney Morning Herald*, Saturday 27 October 1962, p.4.
109 ‘Cliff rescue: give them medals’, *The Sydney Morning Herald*, Tuesday 14 December 1965, p.5.
110 This truly bizarre episode was dramatised in a 1997 film titled *Mr Reliable.*
111 *Police annual report for 1960,* p.29.
112 *Police annual report for 1964,* pp.21-22.
113 A 1969 Minute from Ray Tyson to the OIC Police Training Centre, titled *Application for the authorised strength of the Police Rescue Squad to be increased by four personnel.*
114 ibid.
115 McHales Navy was a 1960s slapstick US comedy television show set during World War II where a patrol torpedo boat crew of misfits got up to antics in each episode, much to the chagrin of their stern ‘by the book’ commander.
116 Ray Tyson’s 1969 Minute, op. cit.
117 One of the more amazing episodes of Beecroft’s extraordinary experiences was his surviving the sinking of the ship that was transporting him and others to Japan. The ship had been attacked by allied aircraft.
118 During his captivity, Beecroft regularly carried heavy buckets around with his injured arm, to straighten it. He also became impervious to the sensations caused by heat, including hot water.
119 The Force’s doctor conducted routine checks to ensure the drugs were accounted for. They were removed from the vehicle in the mid-1970s when ambulance paramedics began to carry similar drugs in their vehicles.
120 The unusual name emanated from GMC’s naming conventions used when the vehicle was designed in World War II: D – designed in 1942; U – utility; K, all-wheel drive; and, W – dual rear axles.
121 *Police annual report for 1955,* p.10.
122 ‘50th Anniversary – 1955 Hunter River flood, defence force involvement’, *In support: magazine of the friends of the 2nd infantry battalions*, February 2005, p.9.
123 This was not the only tragic rescue incident during the 1955 Maitland floods; earlier, on Friday 25 February, two men died

when they fell from a rope lowered to them by a military helicopter. The helicopter itself struck high-tension power lines and fell from the sky – the aircraft's two crew survived but were swept away by floodwaters for several kilometres before being rescued themselves.
124 In early 1956 the organisation was incorporated into the Civil Defence Organisation. It was subsequently named the State Emergency Services and is today called the State Emergency Service.
125 'State Emergency Service on way', *The Sydney Morning Herald,* Wednesday 4 May 1955, p.3.
126 *Police annual report for 1958,* p.11
127 For many years in the 1960s and 1970s the full-time member was Swanny Ivaarson, a future OIC of the Police Rescue Squad.
128 *Police annual report for 1972,* p.14.
129 Garry Smith, Interview with the author, 24 January 1995.
130 NSW Police Department, *Submission to the Committee of Inquiry into the NSW Fire Brigades*, p.65.
131 Two other sets were also stored in Newcastle, and one set each at Sutherland, Manly and Wollongong police stations.
132 The Scenic Railway is a rail line first used in shale mining operations in the 19th Century. For almost 100 years the site (with a nearby cable car) has been a tourist attraction.
133 Fred Lord, op. cit., p.126.
134 So named after one of the main streets near the centre of Sydney.
135 In Morse Code the letters SOS stand for 'save our souls'.
136 NSW Police Force occurrence pad entry from Katoomba Police Station, dated 11am, 31 January 1968.
137 Ken Holmes, Interview with the author, 28 March 1995.
138 One of the early tasks of the team was the dismantling of the rusting remains of a Cliff Rescue Machine set up during the war near Wentworth Falls.
139 Joe Beecroft, Departmental Minute about the rescue events on 20 April 1971, 26 April 1971.
140 Blue Mountains Police Rescue Squad, *20 Years Down the Track,* In Print Publications, 1988, p.18; Bill Fahey had remained with Rescue 1 during the operation, at one point spending considerable effort in driving it up the narrow dirt track, away

from the cliff's edge.
141 NSW Police Department, *Submission to the Committee of Inquiry into the NSW Fire Brigades*, p.65.
142 *Police annual report for 1972,* pp.12 -13.
143 Data drawn from the respective annual reports from 1971 – 1976.
144 Malcolm Brown, 'Danger man takes up the quiet life', *The Sydney Morning Herald,* Tuesday 25 October 1977, p.7.
145 *Police annual report for 1973,* p.15.
146 Bill Fahey's recollection was that his attendance was not well received by the firemen, who despite their industrial action, didn't want to lose the truck to the police. It was probably the only time in history that a member of the Police Rescue Squad in Sydney ever drove a marked fire engine.
147 The only compartment that Lamb and Gane could not modify themselves was the one to store the posts to the Cliff Rescue Machine. This had to wait until sufficient operating funds could be found to engage a specialist.
148 Home phone ownership was still sufficiently uncommon until the late 1970s that the Force paid for telephone lines to be installed and rented at the homes of Rescue Squad members. A notable exception was Bill Fahey who in the 1970s lived in a house immediately adjacent to the Redfern Barracks. VKG were instructed to ring the Breath Analysis Section's office (which was staffed 24 hours a day) and the police officer on duty would run around to knock on Fahey's door!
149 NSW Police Department, *The Darwin disaster, report of debriefing committee New South Wales Police Department, Friday 31st January 1975,* p.4.
150 ibid, p.4: The members left in Sydney did make it into the news while the rest of the team was deployed. On Friday 10 January 1975 Gary Raymond, Swanny Ivaarson and Arthur Irwin rescued a four-day-old puppy stuck in a drain in Newtown. For this they had their photos taken and put on page three of *The Sydney Morning Herald* on 11 January 1975.
151 Ray Tyson, Interview with the author, 27 October 1994.
152 NSW Police Department, *Darwin debrief,* op. cit., p.7.
153 Peter Robb, Interview with the author, 18 July 2016.
154 Bill Fahey, Interview with the author, 30 May 1994.
155 Walters' father was at the time the Chief Medical

Superintendent of the Prince of Wales Hospital in Sydney, and personally knew many senior police and government officials.
156 The creation of the VRA was not a spur-of-the-moment thing. Discussions about the proposal, including debates over a proposed constitution, occurred for months in the lead- up to the meeting.
157 NSW Police Department, *Submission to the Committee of Inquiry into the NSW Fire Brigades*, p.68.
158 The Volunteer Rescue Association later created a wombat character as the organisation's mascot. Its name is Tyson, in reference to his habit of calling his students 'wombats'.
159 Tyson had been paid as an acting Inspector Third Class since 23 March 1972.
160 Bruce Gane, Interview with the author, 23 November 1993.
161 ibid.
162 NSW Police Department, *Submission to the Committee of Inquiry into the NSW Fire Brigades*, p.66.
163 J.H. Staunton, *Report on the Formal Investigation of an accident on or about the up main western railway line at Granville on 18th January, 1977,* N.S.W Government, 1977, p.9.
164 Lamb's wife Elisabeth instead returned home to grab a set of rescue overalls, boots and cap. She drove with her young children back to the scene and had a general duties policeman deliver the gear to her husband.
165 Barry J Gobbe, *The Granville train disaster 18th January 1977*, The Granville Train Disaster Memoriam Foundation, 2011, p.37.
166 Malcolm Brown, 'Tracks of our tears', *The Sydney Morning Herald,* 17 January 2007, p.14.
167 Bill Fahey, Interview with the author, 30 May 1994.
168 Malcolm Brown, 'Tracks of our tears', p.14.
169 The Sydney police rescue operators were Sergeants Joe Beecroft and Bill Fahey, and Constables Dick Lamb, Bruce Gane, Gary Raymond, John Wilson and Graham Jessop. Sergeant Swanny Ivaarson and Constable Jack Hall were off-duty and uncontactable on the day – they arrived the following day to assist. The Blue Mountains members were Sergeants Ernie Sanderson, Barry Hodge and Ken Holmes (Katoomba Police Station), and Senior Constables Robert Blakemore (Blackheath) and Colin Clarke (Lawson).
170 The short documentary film titled *Granville*, Film Australia,

1977.
171 D.R. Williams, *Report of rescue co-ordination of the victims of the Granville Rail Disaster – Tuesday, 18 January,* 1977, 28 January 1977, p 6.
172 Apart from police, the emergency groups and agencies with rescue personnel at Granville included the Ambulance Service of NSW, NSW Fire Brigades, NSW Civil Defence, VRA units from the South Coast and Penrith, the Red Cross and St John Ambulance. Medical and engineering personnel from the Royal Australian Air Force and the Australian Army were present, as were scores of workers from local and state government departments.
173 Mike Gibson, 'A Hand Held out for Hero Joe', *The Daily Telegraph,* 18 February 1998, p.10.
174 *Granville,* op. cit.
175 D.R. Williams, op. cit.
176 Bruce Gane, Interview with the author, 23 November 1993.
177 There was only one instance of property being incorrectly identified. Sixty nine bodies were positively identified prior to being removed from the site; P.J. Christopher, 'Medical aspects of the Granville Rail Disaster', *The Medical Journal of Australia,* Australasian Medical Publishing Company, Ltd, Volume 2 Number 12, September 17th, 1977, p.384.
178 Bill Fahey, Interview with the author, 30 May 1994.
179 'Death was quick, says doctor', *The Sydney Morning Herald,* Tuesday 1 March 1977, p.12.
180 The NSW Fire Brigades was a partial exception in that their legislation at the time empowered them to conduct rescues within 'fire grounds' (ie: during firefighting operations).
181 Rescue operator John Wilson was decorated for his role at Granville however he was subsequently medically discharged due to physical and psychological injuries.
182 The sudden release of pressure on the muscles in the limbs can cause releases of potassium, acid flood, bleeding and myoglobin. Each can cause fatal results when the substances reach major organs such as the kidneys and heart.
183 Australian Emergency Management, *The Granville rail accident: the rescue operation and its toll,* viewed on 20 March 2016 at: https://www.emknowledge.gov.au/resource/get/?id=4542, p.4.
184 Because of his interest in medical issues, Gary Raymond had

previously written summations of medical reports on conditions like crush syndrome for his Rescue Squad colleagues.
185 Gary Raymond, Interview with the author, 29 March 1995.
186 Bruce Gane, Interview with the author, 28 September 1994.
187 John Byers, Interview with the author, 12 July 2016.
188 This was not the only time that rescue operators have argued with medical staff against proposals by the latter to amputate limbs. Police rescue operators pride themselves on being able to rescue people intact.
189 Although for a time they shared the building with 21 Division and surveillance police.
190 An average shift at this time was eight hours and 30 minutes. Twelve hour shifts were introduced in the 1990s.
191 In retirement Joe Beecroft returned to his home district at Lidsdale to fish and relax. He died at the age of 80 on Monday 16 February 1998.
192 '$16,000 van handover', *The Goulburn Evening Post,* Tuesday 18 October 1977, p.5.
193 Ron Gibson, *Newcastle Police Rescue Squad, 10 years on,* In Print Publications, 1988.
194 Goulburn Police Rescue Squad, *10 years rescue service to Goulburn district,* 1987, p.1.
195 The Land Cruiser loaned to Lismore was allocated to the Blacktown unit in early 1980, until the latter received their F350 in April of that year.
196 *Police annual report for 1981,* p.35.
197 Ken Baret, Interview with the author, 18 July 1994.
198 Statistics are taken from the respective departmental annual reports. The Force stopped reporting on a calendar year basis in 1982, and moved to a financial year reporting basis with the first report covering January 1982 to June 1983.
199 Brian Carr, Interview with the author, 2 August 1994.
200 ibid.
201 Ken Baret, Interview with the author, 18 July 1994.
202 John Glossop, Interview with the author, 6 May 2016.
203 ibid.
204 For the sake of thoroughness police had to investigate theories in order to establish their veracity. This was a drain on limited staffing resources.
205 Police immediately assumed the skull (and teeth) was that of

Mr Crean. It took some days for checks of dental records to confirm the assumption.
206 John Glossop, Interview with the author, 6 May 2016.
207 'Skull identified as being that of Stephen Crean', *The Canberra Times,* Friday 23 January 1987, p.1.
208 'Six months' jail for bone collector', *The Canberra Times,* Thursday 5 February 1987, p.1.
209 Malone had worked in a bank briefly between high school and joining the police.
210 Tony Malone, Interview with the author, 18 July 2016.
211 Allan Woodhams, Interview with the author, 2 August 2016.
212 The operators were Arthur Ackroyd, Swanny Ivaarson (OIC), Graeme Jessop, Norm Place, Brian O'Rourke and Gary Raymond.
213 In later reflecting on the incidents, Lamb recalled that if they had fallen, it would have been onto the ambulance parked on the roadway directly beneath the group: Dick Lamb, Interview with the author, 30 November 1995.
214 Ackroyd would again rescue the man months later at North Head, on another occasion he threatened to jump. In attempted suicide cases it is common for rescue operators to deal with the same people on two or more occasions.
215 The police from the Rescue Squad were John Carter (OIC), Dick Lamb, Gary Raymond, Garry Smith, Rod Stewart, Neil Turley and Garry Vucetic. Twice during the night Smith was called away to attend road rescue calls in northern Sydney, once Carter accompanied him and for the other occasion it was Stewart.
216 'Fire victims' parents thank police', *The Sydney Morning Herald,* Wednesday 13 June 1979, p.1.
217 John Carter, Report dated 16 November 1979: Ironically, the vehicle company that occupied the premises also sponsored an annual rescue award for the most meritorious police rescue operations in a given year. In 1979 the award was presented to Arthur Ackroyd, Dick Lamb and Bruce Gane for their Sydney Harbour Bridge rescue.
218 Bob Blazey, 'On a rope and a prayer', *NSW Police News*, Police Association of NSW, June 1981, p.18.
219 Arthur Ackroyd, Interview with the author, 7 February 2017.
220 'Sergeant praises heroic efforts of five miners', *The Sydney*

Morning Herald, Thursday 6 August 1981, p.3.
221 Bill Fahey, Interview with the author, 30 May 1994.
222 Brad Crouch and Mike Smith, 'Chainsaw within a whisker', *The Daily Mirror*, 16 November 1982.
223 Even though the lake was just at 30 per cent of its normal capacity, the wreckage was still 16 metres below the waterline, well ensconced in mud but upright: NSW Police, *Nemesis*, No. 46, February 1983, p.1.
224 *20 years down the track,* (20th Anniversary Publication for the Blue Mountains Police Rescue Squad), In Print Publications, 1988, p.6.
225 Daniel Moore, 'Schoolboy freed after nine-hour ordeal in crevice', *The Sydney Morning Herald,* Monday 25 June 1984, p.3.
226 Eligibility to join SWOS was restricted to qualified detectives who performed their substantive investigative duties until being called to a high-risk incident.
227 David Longworth, 'April fool', *Hornsby police rescue squad*: *a decade of service,* 1987, p.7
228 *The Daily Mirror,* Monday 12 January 1976, p.15.
229 Seg Bramble, Interview with the author, 28 July 2016.
230 Ted Doherty, Interview with the author, 1 November 1995.
231 The NSCA is a non-profit volunteer organisation that expanded rapidly in the 1980s, acquiring a range of helicopters, vessels and staff capable of undertaking search and rescue, industrial rescue and para-rescue operations. Spectacularly, the organisation lost its capabilities almost overnight when it was revealed in 1989 that the expansion had been financed through fraud.
232 David Aspland, 'Women in the force', Patrick Lindsay, *True blue: 150 years of service and sacrifice of the NSW Police Force,* Harper Collins, 2012, p.126.
233 *Police annual report for 1978,* p.7.
234 Ray Tyson, *Proposed use of women police at scene of emergencies, such as bush fires, air disasters, floods, etc, in conjunction with male members of the service,* 9 January 1969.
235 Sally Place, Interview with the author, 27 July 2016.
236 Like many male rescue operators, Verhage had moments where she struggled with the heaviest items of equipment (especially the Jaws of Life). At actual rescue operations, she would call on onlookers (particularly if they made comments

about her gender) to help carry the items. This more than not put them in their place.
237 Verhage's arrival was somewhat auspicious at the squad as it coincided with the team winning $500,000 in the Lotto.
238 Simone Beaupark, Correspondence with the author, 29 August 2016.
239 Ken Holmes, Interview with the author, 1 August 2016.
240 The reason the Green Valley Police Station was a series of demountable buildings from the late 1970s to the early 1990s was that the original station had ben badly damaged by a fire (arson attack) in 1976 and had to be knocked down.
241 One type of vehicle that still requires a heavy vehicle licence is a prime mover. From the late 1970s onwards the squad (now Rescue and Bomb Disposal Unit) have often had a prime mover stationed at their base, used by various units to tow large trailers of equipment.
242 In a negative pressure self-contained breathing apparatus the wearer receives air only when the person breathes in. A positive pressure unit maintains a higher degree of pressure inside the face mask that the air immediately outside of it. This means the risk of toxins, smoke, water etc, penetrating the facemask is substantially reduced.
243 The Larkin Frame requires a flat surface for setup and can only be used for straight drops without large protruding rocks or obstacles below. The frame is also prone to 'walking' when under weight, if it is not properly secured to the surface by bolts.
244 By his own admission Wade was quite driven in the project. He was particularly keen to acquire quieter and more fuel-efficient generators as the sets then in operation were extremely loud and caused hearing damage. They also breached nighttime noise pollution regulations that ironically, the police were responsible for enforcing.
245 The Ambulance Service of New South Wales, the New South Wales Fire Brigades, the New South Wales Police, the New South Wales State Emergency Services and the Volunteer Rescue Association.
246 The lead agency for combating bushfires and fires outside of rural centres is the NSW Rural Fire Service, which until the 1990s was known as the Bushfire Brigades.
247 Debra Jopson, *The red brigade: the official history of the New*

South Wales Fire Brigade Employee's Union, NSW Fire Brigade Employees' Union, NSW, 1994, p.105.
248 Between the 1930s and 1980s several FBEU leaders had strong affiliations with the left of politics, with some being members of the Community Party.
249 The inquiry was known as the 'Parkinson Committee', after its chair, the then head of the Government Stores, Mr Keith Parkinson. The two other committee members were a retired Deputy Chief Fire Officer and the then FBEU Secretary.
250 NSW Police Department, *Submission to the Committee of Inquiry into the NSW Fire Brigades*, pp.73-74.
251 Committee of Inquiry into the NSW Fire Brigades, *Report to the Minister for Lands and Services, the Honourable W.F. Crabtree, M.P,* November 1978, Appendix 2, pp.209 – 217, & pp.245 – 246.
252 The decision by the State Government to conduct the inquiry was sufficient to force the 1977 resignation of the then Board President who had been the main opponent to the FBEU and brigades' involvement in rescue. Through legislative amendment to the *Fire Brigades Act* in 1977 the Board also lost is statutory independence and became answerable to the relevant Minister.
253 Letter from Board of Fire Commissioners Secretary WR. Beare to Mr Max Walters, President of the NSW Volunteer Rescue Association, 18 September 1981.
254 Stuart Maxwell, 'Submission to the New South Wales rescue policy review from the New South Wales Fire Brigade Employees' Union', *NSW Firefighter,* Sydney, June 1988, p.45.
255 Up until the late 1970s many ambulance districts were heavily reliant on public fund raising (including the literal 'chook raffles') to fund ambulance operations. While the NSW Government took over funding arrangements when the various ambulance services were amalgamated in 1976, the effects of low funding levels impacted ambulance operations for many subsequent years.
256 The ambulance officer later told the media and his colleagues that he was pushed to the ground. Police denied this. Other ambulance officers at the scene did not speak out in support of their colleague.
257 Today there are numerous police with the advanced life

support qualifications that were sought by Raymond and Gane. These officers are attached to police tactical (assault) teams.
258 A perennial example is what occurred upon arrival at a road rescue: police, VRA and ambulance rescuers are trained to inspect the scene first, form a strategy and then select the required equipment from their vehicle. For decades firefighters were trained to lay down a tarpaulin on the ground near the crashed vehicle and then place onto it, hydraulic and other equipment from their fire engine, before determining what strategy to use.
259 *Police annual report for 1981,* p.27.
260 Ron Grey, *Report on the review of rescue policy in New South Wales*, Office of the Minister for Police and Emergency Services, 28 June 1988, p.35.
261 In these and other instances, the police were often the ones to rescue trapped people and recover deceased victims as the firefighters (who did not have breathing apparatus themselves) found it impossible to see in the dense smoke.
262 In 1985 the NSW Fire Brigades allowed women to join the organisation. When this occurred the title 'fireman' was changed to 'firefighter'.
263 Increasingly from the mid-1980s onwards the FBEU's rescue campaign was linked to productivity arguments to resist (perceived or real) plans by successive governments to close fire stations and reduce staffing numbers.
264 Grey believed the RESCC had not been successful 'basically because the fundamental stated authority of the Police in rescue situations has not been accepted, and each Service has taken refuge in its own legislative base': Ron Grey, op. cit., p.74.
265 Grey was also highly critical of the state's disaster management framework. He made a series of recommendations to improve the framework including dramatically restructuring the State Emergency Services.
266 Ron Grey, op. cit., p.76.
267 Such a position contravened the spirit (if not the letter) of a 26 November 1974 agreement between the unions (sought at the request of the FBEU) for none of them to seek the sole industrial right of undertaking 'civilian rescue work'. Seeking sole coverage was certainly a complaint the FBEU laid against the police on numerous occasions in the 1970s and early 1980s.

268 Stuart Maxwell, op. cit.
269 The *Illawarra Mercury*, Friday 22 September 1989, as cited in Hansard, Thursday 28 November 1989, p.13511.
270 Codes requiring buildings to be earthquake resistant were not compulsory at the time, and in any case, the relevant recommended level for the Newcastle area was '0', the lowest rating.
271 Neil Wilson, 'Bargain shoppers paid with their lives', *The Daily Telegraph,* Wednesday, 29th December 1989, p.3.
272 The phrase was used by Professor Rob Melchers of the University of Newcastle, during his testimony to the coronial inquiry: Kevin Waller, *Coronial findings,* 1990, p.7.
273 Ron Gibson, Interview with the author, 1 June 1995.
274 The stories of two police rescue operators are instructive. Constable John King had just completed his rescue training and the earthquake was his first rescue incident. Off-duty when the quake struck, King raced home and grabbed his kit before self-responding to the Workers Club. Allan Woodhams also self-responded, although he had recently resigned from the Force. Given his extensive rescue experience, Woodhams was given a pair of overalls and worked for that long day with his former colleagues. Some years later Woodhams rejoined the Force and eventually served as the OIC of Newcastle's Police Rescue.
275 Ron Gibson, Interview with the author, 1 June 1995.
276 The flight to Newcastle was self-initiated as no contact could be made with Newcastle police because of the damaged radio and telephone network. Holmes and Robb came across the Workers Club site by chance, while making their way to the New Lambton rescue base.
277 Ken Holmes, Interview with the author, 28 March 1995.
278 ibid.
279 Over $110,000 was located from an estimated total of $131,000. The remaining amount was lost in the rubble.
280 *Statement of Garry Smith*, 29 March 1990.
281 Esther McKay, *Crime scene: true stories from the life of a forensic investigator,* Viking, 2005, p.190.
282 Kevin Waller, *Coronial findings,* Wednesday 18 July 1990, p.2.
283 Peter Robb, Interview with the author, 27 January 1994.
284 It was claimed that in at least one instance owners took

advantage of the emergency to demolish a premises without a valid permit.
285 Kevin Waller, *Suddenly dead*, p.85.
286 ibid., p.86.
287 'What the Mirror says', *The Daily Mirror,* Wednesday 14 February 1990, p.1.
288 Kevin Waller, *Suddenly dead,* pp.86-87.
289 *Statement on behalf of the NSW Department of Fire Brigades,* issued in July 1990.
290 Kevin Waller, *Suddenly dead*, pp.92.
291 Kevin Waller, *Coronial findings,* p.11.
292 Kevin Waller, *Coronial findings,* p.15.
293 Kevin Waller, *Coronial findings,* pp.18-19.
294 *Police annual report for 1987/1988,* pp.94-95.
295 Data obtained from Police Association files, *Briefing paper for Commissioner of Police re: Police Rescue Squad – operational support role,* 1993.
296 *Frenchs Forest Police Rescue Squad: a decade of service,* 1990, p.21.
297 One of Verzosa's lasting memories of the tragedy was of him and his gun being totally caked in mud. The gun had to be fully serviced and cleaned afterwards: Manii Verzosa, Interview with the author, 8 December 2016.
298 On his ascent Rice experienced further problems with a rusting iron rod catching the knob at the base of his oxygen bottle, ripping the mask from his face. Rice was again exposed to the foul air.
299 'A harrowing experience', *NSW Police News,* August 1995, p.35.
300 See the chapter titled 'The Harrowing'. For a vivid account of the incident and its impact on the forensic police involved, also see Esther McKay's book *Crime scene: true stories from the life of a forensic investigator.*
301 For most of the operation the hauling party consisted of a mix of SES volunteers and the family and friends of the deceased man, under police direction.
302 Sutherland's Police Rescue were relocated to Engadine Police Station on 1 April 1991.
303 Sergeant Seg Bramble, Senior Constable Terry Betts, Constable First Class Phillip Downes and Constable Troy Klower.

304 The pilot had not lodged a flight plan, the plane's emergency signal transmitter was destroyed when it crashed, and no-one saw it hit the ground. In short, the air search was a needle-in-a-haystack operation.
305 The media dubbed him 'Torpedo Ted' for a number of imprudent comments he made in both opposition and government.
306 Ted Pickering, Interview with the author, 18 November 1993.
307 For key definitions from the Act and the State Rescue Policy, see Appendix D.
308 NSW Hansard, Tuesday 28 November 1989, p.13501.
309 Ted Pickering, Interview with the author, 18 November 1993.
310 Pickering also hoped the VRA would merge into the SES, and wanted ambulance rescue units to be phased out. His ministerial remit didn't extend to ambulance operations and he did not have any direct control over the VRA.
311 Pickering had initially intended to never release the report because it would embarrass firefighters and potentially damage public confidence in the Fire Brigades. In mid-1989 a journalist applied for a copy of the report under freedom of information laws recently enacted by the government. Knowing the report would be made public, and concerned that some of the contents were arguably actionable in a legal sense, Pickering opted to table the full document in Parliament.
312 In formulating their recommended list of units to accredit, Grey's team drove over 40,000 kilometres to inspect and assess 99 police stations, 48 ambulance stations, 152 fire stations, 53 VRA groups and 75 SES units. The team did not have the time to inspect every rescue unit in the state. They also analysed available data on rescue calls and incident locations.
313 Not every location had both a local primary and secondary unit. In many towns the secondary unit was based in the next nearest town.
314 For decades the term 'volunteer' was used within the NSW Fire Brigades for members of the public who are trained and respond to fire calls in small communities where there was an insufficient workload to justify the employment of full-time firefighters. These part-time firefighters are paid for their

services on an hourly basis. In the late 1990s the term 'volunteer' was replaced with 'retained'.
315 Ted Pickering, 'Minister praises rescue effort', Press Release, Tuesday 13 March 1990.
316 Ted Pickering, 'Anderson attacked on misinformation', Press Release, Tuesday 20 March 1990.
317 Many senior and experienced rescue operators from various services also questioned the actual need for secondary accreditations in most rural areas.
318 Police Association of NSW, *Statistics of rescue and non-rescue incidents,* 1994.
319 On 1 October 1991 the number of accredited units in Sydney was reduced to 19 (six police, four ambulance and nine fire units). Even then it was felt that there were still a few too many.
320 Brian Howard, 'NSWFB rescue service/changeover from regional PRS units to NSWFB', SRESB Minute, 13 December 1990.
321 NSW Hansard, 26 February 1991, pp.139-140.
322 The Task Force consisted of five men: two SRESB officials (including Sergeant Bruce Gane who was attached as a training advisor), a senior ambulance officer and a senior firefighter. The police representative was Senior Sergeant Dick Lamb.
323 Ted Pickering, Interview with the author, 18 November 1993.
324 The police squad in Bathurst was to be replaced by the city's SES unit, with the other police squads to be replaced by the Fire Brigades.
325 Cindy Jones, 'NSW rescue units clash', *The Sun-Herald,* Sunday 24 March 1991, p.27.
326 Rumour has it however that the wharf was a great place to fish.
327 Sonya Zadel, 'NSW Police Rescue Squad: new accommodation for internationally-recognised unit', *Police Service Weekly,* 3 August 1992, p.31.
328 Ted Pickering, Interview with the author, 18 November 1993.
329 Glyniss Patterson, 'Minister rescues 'gong police squad', *The Illawarra Mercury*, Friday 30 October 1992, p.5.
330 During a three-month period 89 requests for support were

made. Zetland could only service 12 requests, the Fire Brigades and Ambulance Service between them serviced five.
331 Under Holmes' proposal the Sydney Metropolitan Area would have been divided into a northern and southern zone, with one truck and two operators dedicated to each zone, per shift.
332 A provision of the SERM Act prohibits any organisation having the word 'rescue' on vehicles unless the vehicle is part of an accredited unit. Since the Act was first passed it has been amended to enable rescue to be displayed if it is part of the organisation's name (eg: Fire & Rescue NSW).
333 Stewart Woodward, Interview with the author, 10 May 2016.
334 Terry Griffiths, Interview with the author, 23 August 1994.
335 The other police teams were not assessed as they were to be devolved. The Zetland cohort were assessed to provide a benchmark in which to consider the other units.
336 Griffiths didn't personally share Pickering's views on who should undertake rescue: Terry Griffiths, Interview with the author, 23 August 1994.
337 Terry Griffiths, *Letter to Mr A L Day, President, Police Association of New South Wales,* 23 November 1993.
338 Griffiths did not get to officially reconsider his position as on Monday 27 June 1994 he resigned his Ministry in the wake of numerous complaints from female office staff about his inappropriate behaviour.
339 At one stage Garry Smith gave a verbal presentation to senior police recommending that extra staff be transferred to Zetland to allow one truck and a crew of two to cover all OSU work to the north of the Parramatta Road/M4 Motorway axis, and one to the south. This was not accepted.
340 The Royal Commission was conducted between 1994 and 1997. Entrenched corruption, misconduct and malpractice were detected in many areas of the Force. Hundreds of police resigned or were sacked for their involvement in, or tolerance of, corrupt practices, or for mismanagement. Some were gaoled.
341 The rescue vehicle that travelled outside of Zetland's rescue area the most was the lighting truck, used to light crime scenes. For many years it had the word 'rescue' removed from the vehicle.

342 The electrical fire in a radio and radar workshop produced a tremendous amount of smoke and an intense heat that penetrated the squad's rear wall. Fire suppression equipment remained functional during this second fire, which enabled the on duty rescue operators to stop the fire spreading, before the arrival of firefighters.
343 Personnel from SWOS and TRG had been involved in separate incidents (in 1989 and 1990) where unarmed men were shot in their homes at night (one died, the other was seriously wounded). Both incidents attracted widespread public outrage and official criticism. Reviews of unit methodologies and practices resulted in the decision to abolish the two groups and create a smaller full-time SPG cadre.
344 Cooma's Hino experienced engine problems and despite it eventually making it to Thredbo, the truck was taken away the following day for repairs.
345 The lights were attached and affixed to the vehicles, which could not be driven too close to the edge of Bobuck Lane.
346 Eventually it would be established that 19 people had been victims of the landslide. The 20th person had been in the vicinity of the landslide but was not injured. She returned home intrastate not realising she had been reported as missing.
347 The hovering helicopter caused substantial amounts of debris to fly around and exerted dangerous downward air pressure on the slabs. Consequently, an idea to use Army Chinook helicopters to pick up whole slabs, was discarded.
348 Derek Hand, *Report of the inquest into the deaths arising from the Thredbo landslide,* NSW Coroner's Office, 29 June 2000, p.161.
349 ibid.
350 'Rescuers hit concrete barrier', *Sydney Morning Herald,* Saturday 2 August 1997, p.1.
351 Mike Taylor, 'Hopes turn to grief', *The Canberra Times,* Saturday 2 August 1997, p.1.
352 Live media coverage of the event transfixed the nation; it was one of those events where most Australians watched at least part of the drama unfolding live on their television sets.
353 The presence of interstate rescue personnel is allowed for under the SERM Act.
354 Stewart Woodward, Interview with the author, 10 May

2016.
355 The majority of rescue operators were housed in one of the lodges at Thredbo. Because of the limited accommodation, a number of emergency personnel and support staff (including several senior police) were accommodated at Jindabyne – a 30-minute drive away.
356 Garry Webster, Interview with the author, 1 November 2016.
357 Rescue operators from all services were also told not be filmed laughing or telling jokes whilst on the side of the mountain. The concern was the risk that the sharing of jokes and black humour in what was otherwise an unrelentingly haunting mission, would be misinterpreted as being uncaring or unprofessional.
358 There were a handful of instances of stressed, focussed and tired operators from differing organisations refusing to leave the site. Each eventually left after either being spoken to by friends, or negotiating approval to remain for a small amount of time.
359 Stuart Diver with Simon Bouda, *Survival: the inspirational story of the Thredbo disaster's sole survivor*, Momentum, Pan Macmillan Australia, 1999, Chapter 15.
360 Stuart Diver with Simon Bouda, Chapter 15.
361 Derek Hand, op. cit, p.5.
362 Derek Hand, op. cit, p.162.
363 Manii Verzosa, Interview with the author, 8 December 2016.
364 USAR techniques gained public prominence in the wake of the 1995 Oklahoma City bombing. The NSW Fire Brigades embarked upon USAR training in 1997 and later established a USAR Task Force equipped for short-notice deployment.
365 The competitive mindset among some at Thredbo was briefly glimpsed in a public statement by a Fire Brigades' spokesperson that gave the impression that it was a Brigades-only rescue party that discovered Stuart Diver. In reality it was a multi-agency, multi- jurisdictional team, as was acknowledged by the firefighter who first heard Mr Diver, when he later spoke to the media.
366 Stewart Woodward, Interview with the author, 10 May 2016.
367 Paul Smith, Correspondence with the author, 5 August 2016.
368 The actual method of rendering safe varies depending on a

range of factors; they can include shooting the device with a shotgun, disintegrating it with high pressure water, burning it, or using a small explosive charge in such a way as to explode the device with minimal damage to the surrounding area.
369 'Man held in hippie plot to bomb CIB building', *The Canberra Times*, Monday 6 January 1969, p.3.
370 'Inquiries on bomb plot in three states', *The Canberra Times,* Wednesday 8 January 1969, p.3.
371 This was a sad case where an immigrant hired a motor mechanic to 'scare' the woman because the immigrant felt the woman was giving him an 'evil eye'. The mechanic was paid $2500 to place a small explosive in the woman's car to frighten her. Three sticks of gelignite, with nails attached, destroyed the front half of the car and mortally injured the woman – her son was in the back seat and survived. The mechanic was sentenced to life imprisonment for murder, the immigrant was sentenced to 10 years' imprisonment for manslaughter and two accomplices also received periods of imprisonment.
372 The company had links to the Yugoslav government and it was suspected that Croatian separatists were behind the attacks. No one has been convicted of the bombings.
373 'Extortioner plants two city bombs', *The Sydney Morning Herald,* Saturday 17 March 1973, p.1.
374 During his Canberra trial, the 35-year-old unemployed man of no fixed place of abode, stated he had a strong dislike of violence and his actions had been without malice – 'I only intended to do what was right'. He also stated he been chosen to lead the country and restore the mental health of the country. He was sentenced to five years imprisonment and to receive psychiatric counseling: 'Accused admits city bombing', *The Sydney Morning Herald,* Friday 29 June 1973, p.21.
375 *Police annual report for 1974,* p.19.
376 NSW Police Force Circular No. 134, *Instructions for the guidance of police dealing with bomb threats and the discovery of explosive or suspected explosive devices,* 28 November 1972.
377 The fishing lines could be tied to suspicious packages, and used to pull the packages over with police at a distance, in case the package detonated.
378 This is totally contrary to contemporary practice where such items are rendered safe in-situ wherever possible.

379 *Police annual report for 1972,* p.13; *Police annual report for 1973,* p.14; *Police annual report for 1974*, p.30.
380 New members to the unit were placed on the first available course at Bandiana. Mostly, only one or two courses were conducted each year. Failure to pass the course placed the member's position in the Ballistics Unit in jeopardy.
381 The Ford had been acquired with financial support from SACPAV, its pantech rear had been custom fitted to store the Echidna and items of equipment, and had a small workbench.
382 Ray Constable, Interview with the author, 28 July 2016.
383 The Mercedes could also be used as a forward command post at major incidents, and was deployed intrastate in the wake of two serious bus crashes at Grafton and Kempsey, and to the Newcastle earthquake, in 1989.
384 Subsequently the International Paralympics Committee awarded Sydney the hosting rights for the 2000 Paralympic Games.
385 The review recommended an enlarged team should be led by an inspector, and consist mostly of police bomb technicians although former military technicians and/or technicians from other police services could be either employed, contracted or seconded as instructors for Olympics preparations.
386 The demountable building the team worked from at Zetland had no running water or ablutions facilities, and while adequate in size for four police, would be too small if/when the team grew in size.
387 Rumours and discussions continued to swirl that police would be withdrawn from rescue operations. On 20 May 1998 for instance a petition was formally lodged in NSW Parliament praying that a threatened closure of Lismore Police Rescue Squad not proceed.
388 Alas, the actual date of RBDU commencing is another part of the unit's history that has become lost in time. It was probably mid-year.
389 There was at the time, and continues to be, discussion and debate about the type, style, cut and colour of uniforms to be worn. In short, the standard RBDU uniform is white overalls although the charcoal grey (and now blue) bomb disposal overalls can be worn either if the RBDU member is rostered for bomb response duties, or attends a bomb incident.

390 A small number of rescue operators, and at least one bomb technician, also elected to leave the unit.
391 John Williams, Interview with the author, 11 May 2016.
392 Ironically most of the de-cent BATs did not attend the Olympics. They remained at their units, available to respond to any incident outside of Sydney. At Bathurst the BATs were on standby to respond to an incident that could have involved one of the numerous marching bands that were billeted to the city to rehearse for the opening and closing ceremonies.
393 Norm Hazzard, Correspondence with the author, 26 August 2016.
394 For his efforts in the lead-up period and during the Olympics, Smith was subsequently awarded a NSW Police Commissioner's Commendation Medal.
395 There were less than 1000 offences recorded in total: Paul McKinnon, 'Condemned to success – building the security overlay for the XXVII Olympiad', *The Australian police journal,* September 2002, Vol.56, No.3, p.185.
396 ibid., p.186.
397 *Police annual report for 1999/2000,* p.14.
398 'Freedom for man who wore bombs', *The Daily Liberal*, 25 June 2002.
399 'Freedom for man who wore bombs', *The Daily Liberal*, 25 June 2002.
400 This incident has since been used in the Force as a case study for emergency management training.
401 The word 'tailed' is an old mining term describing a stick of explosives which has the detonator and fuse loaded and ready for use.
402 Dennis Martin, Interview with the author, 25 July 2016.
403 Terry Shepherd, Interview with the author, 26 July 2016.
404 The local police officer was later replaced by a police negotiator. These police were not allowed to be too close to the teenager, in case the device detonated.
405 In a protracted investigation, US authorities later established the pizza delivery driver (a drug addict) was a knowing participant in what he thought would be a hoax. At the last minute he was tricked into wearing a real bomb.
406 One of the enduring media myths of the event which still rankles RBDU technicians was that they were stumped by the

case and with no other option, sought the advice on collar bombs from the British military. In reality a British soldier who happened to be in Australia heard media speculation and volunteered his knowledge about IEDs used in the Middle East.
407 Throughout this (and all rescue and bomb disposal incidents), RBDU members do not have overall responsibility for the police operation. The RBDU provides support services to local police, or police units that have the designated lead at an incident.
408 The only two parts not attached were the skull that was tethered more by the roots of grasses than sinews, and a foot that was accidently pulled from the skeleton by the mechanical digger when it scraped the sand away.
409 Nick Papadolpoulos, 'Daddy-long-legs meets long arm of law on city tower', *The Sydney Morning Herald,* Friday 28 February 1997, p.5.
410 Robert was again arrested by rescue operators in 2010 when he climbed another Sydney building.
411 In reflecting on the case, Downes indicated to the author that had the searches been required to be conducted today, current work, health and safety laws and risk management methodologies, would rule out the conduct of physical searches in several mineshafts. In fact, a number of shafts searched have since totally collapsed. Conversely, current technologies such as unmanned aerial vehicles and camera enabled robots, would enable a degree of access: Phil Downes, Interview with the author, 14 July 2016.
412 Simon Robinson, Interview with the author, 13 May 2016.
413 Those passengers who weren't taken to hospital were temporarily housed at a nearby bowling club where welfare support was provided, and buses arranged to take people to their destinations.
414 In this Commissioner Ryan was right. At the time of the collision the author was working in Cyprus and saw news of the collision on Cypriot, Greek, Turkish and British television (all shown in Cyprus).
415 A government-appointed special commission of inquiry into Glenbrook delivered its final report on 11 April 2001. The inquiry's head stated that the collision 'disclosed grave and serious deficiencies in the management of rail safety in New

South Wales'. He made 95 recommendations covering a full range of issues from rail safety to training, drug and alcohol testing for State Rail Authority staff and better communications: Peter McInerney, *Special Commission of Inquiry into the Glenbrook rail accident, final report,* 11 April 2001, p.14.
416 The firefighters had been planning to take industrial action that morning, a three-hour stopwork meeting to protest an ongoing pay dispute. Industrial action would have left only 60 firefighters available to respond to all incidents in the Sydney Metropolitan Area for the three-hour period. The protest was cancelled when the call to Glenbrook was received.
417 Indeed, only half of the entire Blue Mountains' Police Rescue attended the incident. Those based in the Upper Mountains were away that day training in the Claustral Canyon and were uncontactable until they emerged from the wilderness that night.
418 *Police annual report for 2000/2001,* p.5.
419 Thirty-seven of the operators were full-time, most at Zetland.
420 Ian Tomkins, *Review of the NSW Police Service Rescue Units,* September 2001.
421 ibid.
422 Danielle Woolage, 'Illawarra will keep its police rescuers', *The Illawarra Mercury*, Wednesday 15 May 2002, p.6.
423 'Jump lands man on wrong side of law', *The Goulburn Post,* Friday 14 April 2000, pp. 1 — 2.
424 The doors had not opened because of a lack of electrical power. The police were not aware that an override switch discretely located in each carriage. Attending railway staff also either did not know about the switches either, or did not brief rescue crews.
425 Today the system is known as the Incident Command and Control System (ICCS) Plus, a standardisation of incident management practices throughout Australia.
426 Peter McInerney, *Special Commission of Inquiry into the Waterfall rail accident, final report, Volume 1, January 2005,* Sydney 2005, pp.79 – 80.
427 ibid., p.xii.
428 David Neal, 'Off the rails – the Waterfall train crash', *The Australian police journal,* Volume 62, Number 2, June 2008, p.87.
429 Legend has it that Fahey pointed the group in the wrong

direction.
430 'Violent clashes in two cities', *The Canberra Times,* 19 September 1970, p.1.
431 Three matches were played in Sydney and one at Orange. NSW Police also assisted the ACT Police at the game played in Canberra. A total of 13 matches were played at various venues across Australia.
432 Mick Smith, Correspondence with the author, 14 December 2016.
433 It took several days for 10 cleaners to clean the building. It was a delicate operation conducted in high winds, with the cleaners using special wax and hot water under pressure.
434 For a gripping account of this case, see the article: Barry Fay, 'An unexpected "mayday" in November', *Australian police journal,* September 2016, pp.129 – 163.
435 Lyle van Leeuwen, Correspondence with the author, October 2016.
436 The caver was with two friends, including his girlfriend, and remembered he had left a water bottle in a lower chamber of the cave system. It was during the return journey that he became trapped.
437 During their crime scene examination detectives could not find the spent casings from Byers' revolver, and were consequently puzzled by his account of shooting at the offender. When asked about this, the sergeant pulled the six casings from his pocket. When Byers reloaded his revolver during the gunfight he had put the spent casings into his pocket rather than the faster option of letting them drop onto the ground. This time consuming process merely reflected the training procedures of the era, where police undergoing training had to pocket the casings so as to keep them in better condition for being reused at a later time. Training procedures were promptly amended.
438 John Byers, Interview with the author, 12 July 2016.
439 Upon hearing the announcement of the new ammunition the then opposition spokesman for policing matters, Ted Pickering, expressed concerns about the new ammunition: Ross Coulthart, 'New police bullet not a dum-dum, says Paciullo', *The Sydney Morning Herald,* 8 December 1986, p.3.
440 By the time he received his Bravery Medal, Sergeant Byers was the OIC of Wollongong's Police Rescue.

441 Ray Tyson, Interview with the author, 26 January 1994.
442 Peter Robb, Interview with the author, 18 July 2016.
443 Over 230 students had graduated from the course by mid-1981. Most were NSW police but also some personnel from other agencies such as the Australian Federal Police and the military: Bob Blazey, op. cit., p.27.
444 With the expansion of the Marrickville squad in 1977, two positions were allocated to form a training team. Other operators are called upon to deliver specific topics when courses are held. When the two trainers are not delivering or planning training courses, they undertake operational duties.
445 Each operator also has to successfully complete advanced first aid training immediately prior to the commencement of the rescue operators course. The training was at first delivered by the Ambulance Service of NSW however in recent times it can be delivered by private service providers.
446 *Encourage them to cry,* Independent Productions, Sydney, 1983.
447 It was preferred that all rescue operators undertook at least three years of duty (either full-time or part-time), as a minimum return of service. However, unlike the military, the department can't force someone to remain in a specialist unit.
448 Rob Golding, Correspondence with the author, 24 October 2016.
449 When he introduced this assessment, Rob Golding did not know that it was essentially the same type of test that Harry Ware had used in the 1940s at the nearby suburb of Coogee.
450 The effects of a dirty toilet bowl are created by using black boot polish, yet even so, some applicants baulk at completing the task.
451 Mick Smith, Correspondence with the author, 9 November 2016.
452 The national courses are delivered only a few times each year to police and emergency personnel from across Australia. Participants are taught to a high standard the principles of search and rescue both on land and at sea.
453 Mick Smith, Correspondence with the author, 14 December 2016.
454 The man could barely squeeze through the corridor. During the extrication the man's wife briefly disappeared and then

return with a fast food meal for her husband.
455 'The man who saved 1,000 lives', *The Sydney Morning Herald,* Friday 9 January 1976, p.3.
456 Bill Fahey, Interview with the author, 30 May 1994.
457 Fred Lord, op. cit., p.126.
458 Tony Malone, Correspondence with the author, 10 November 2016.
459 Paul Smith, Correspondence with the author, 8 November 2016.
460 ibid.
461 This occurred for instance after Granville. Having worked for over 36 hours straight, the unit returned their vehicles to Redfern then went (in their dirty uniforms) to their local pub. In respect for what the exhausted rescue operators did, the other patrons at the bar paid for their drinks.
462 The overwhelming majority of rescue operators are constables. There are a few sergeants, with the highest rank being Senior Sergeant. Anyone seeking promotion to a higher rank must at some point move away from rescue duties. The RBDU commander position (formerly titled OIC) has been at the Inspector level since 1983. Out of the six inspectors who have occupied the position since the mid-1980s, only two were rescue operators promoted into the position – Ken Holmes & Garry Smith.
463 More than one rescue operator commented for example on the process used at the Thredbo landslide where they were gathered in groups after some shifts and asked to identify themselves if they had any psychological issues they wanted to discuss. No one wanted to embarrass themselves in front of their colleagues, or risk being withdrawn from the operation.
464 Leonie Lamont, 'Police career over after cry for help', *The Sydney Morning Herald*, Tuesday 4 November 2003, p.9.
465 'A harrowing experience', *NSW Police News,* Police Association of NSW, August, 1995, p.35.
466 It is interesting to note that science's understanding of the impact of traumatic stress on humans, and how to counter its effects, is constantly evolving and is sometimes contradictory.
467 The sea mine is a gift to RBDU from the Royal Australian Navy.
468 A small 'Police Rescue Squad' sign posted on the building's

front portico was taken down in 2016 because of the heightened risk of police being targeted by terrorists. The sign had first been displayed at Marrickville, then Zetland and Alexandria.
469 The distinctive markings represent a return to the philosophy of the squad in the 1970s. This was abandoned in the 1990s and early 2000s as Force policy was to have the vehicles a plain white with a minimal amount of markings.
470 The posts of the machine would be periodically X-rayed to ensure there were no hairline cracks in the metal.
471 In 2008 most ambulance rescue units (including those in Sydney, Wollongong and Newcastle) were decommissioned. Responsibility for their rescue areas was transferred to Fire & Rescue NSW.
472 Indeed, one curiosity of contemporary legislation is that in theory rescue operators are required to complete a written risk assessment prior to undertaking any operation. This is obviously burdensome for urgent matters and the operators have a partial exemption in such cases; they are allowed to conduct a mental assessment prior to commencing a rescue but must put it in writing after the incident is complete and it forms a debrief document.
473 Figures provided by RBDU, December 2016.
474 The eight stations (in late 2016) are Armidale, Bourke, Kandos, Moree, Narrabri, Quirindi, Tamworth and Werris Creek. As an example of the vast area covered by the unit, the road distance between Armidale and Bourke is over 600kms.
479 Brenton Charlton, Interview with the author, 9 December 2016.
480 The Western Region rescue operators were Senior Constables Mark Fitzpatrick, Benn King, Travis Pocock and Constable Andrew Smith. The Bathurst recue operators were Senior Constables Matthew Holden and Owen Piepman.
481 Primary accreditation for the area was transferred to the Cooma SES.
482 The Shahada is the Muslim profession of faith.
483 The figure of 151 was correct as of December 2016. Numbers will fluctuate slightly from month-to-month as some operators retire or transfer, and others complete their basic training.
484 Brenton Charlton, Interview with the author, 9 December

2016.
485 ‘The man who saved 1,000 lives: Police Rescue team veteran to retire’, *The Sydney Morning Herald,* 9 January 1976, p.3.
475 There is at least one photograph in the Saturday 6 March 1948 issue of *Australian Women's Weekly* of training being done on a warm summer’s day, where all the squad with the exception of Ware and Tyson, were without a shirt. A titillating photograph for its time no doubt, and undoubtedly frowned upon by senior command.
476 A minute from Ray Tyson to the OIC of the Police Training Centre, requesting the allocation of 24 khaki overalls, 9 June 1969.
477 The Emergency Squad was a tactical policing unit that utilised long-arms, chemical munitions and other items to arrest high-risk offenders – a precursor to SWOS and SPG.
478 The Sillitoe Tartan is named after Sir Percy Sillitoe who as the Chief Constable of the City of Glasgow Police in 1932, introduced a three level black and white chequered pattern as part of the police uniform. A blue and white version of the pattern was subsequently adopted by all Australian police forces.
486 Bill Fahey, Interview with the author, 18 December 1994.
487 A wedge-tail eagle was drawn into the Force’s emblem symbolising justice and the law, drawing a link to the ancient Roman symbol of the eagle. The bird was given the name Nemesis, the name of the ancient Greek goddess of chastisement and vengeance.

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